DOCUMENT RESUME

ED 157 243 EC 111 220

AUTHOR	Gilmore, Joseph T.
TITLE	Technical Assistance in a Collaborative Framework.
INSTITUTION	New York State Education Dept., Albany. Office for the Education of Children with Handicapped Conditions.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C. Div. of Personnel Preparation.
REPORT NO	451AH60852
PUB DATE	77
GRANT	G007602968
NOTE	81p.; For related information, see ED 126 631
EDRS PRICE	MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS	Conceptual Schemes; Elementary Secondary Education; *Handicapped Children; Higher Education; *Models; *Performance Based Teacher Education; Special Education Teachers; State Departments of Education; *Teacher Certification; *Technical Assistance

ABSTRACT

The booklet reviews the products and processes of a BEH (Bureau of Education for the Handicapped) funded project designed to explore the competence based hypothesis and its implications for teacher training, particularly with regard to providing alternative training strategies and models for the certification of teachers in special education. Among conclusions of Section I on technical assistance are that the regulatory and technical assistance functions of a state education agency should be administered through separate offices; that communication is the major technical assistance contribution that a state education agency can make, and that the major item that needs to be communicated is "What decisions are other people making that relate to me?" Section II analyzes survey data in which the educators who participated in the project report on how they feel about it. A third section includes excerpts from the three statewide conferences sponsored by the project and brief descriptions of several modules that were developed. A final section outlines the five instructional modules that were developed, field tested, and evaluated. (SBH)

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TECHNICAL ASSISTANCE IN A COLLABORATIVE FRAMEWORK

Competence Based Teacher Education in Special Education: Prototypical Materials and Model

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Part of the Final Report of
Grant Number G007602968
Project Number 451AH60852

Submitted to
Division of Personnel Preparation
Bureau of Education for the Handicapped
Office of Education
U.S. Department of Health, Education, and Welfare
Washington, D.C.

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The activities which are the subject of this report have been made possible by funding awarded to the Research Fund of the Board of Regents of the University of the State of New York, the State Education Department, Office for the Education of Children with Handicapping Conditions, by the United States Office of Education, Bureau of Education for the Handicapped, Division of Personnel Preparation, Grant Number G007602968, Project Number 451AH60852.

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ACKNOWLEDGEMENTS

I have been privileged to work in the CBTE project with a great number of individuals whose professional and personal qualities have been a rewarding source of professional stimulation and personal enrichment. At the risk of omitting some, I wish to express particular thanks to persons to whom a special debt of gratitude is owing. At the Federal level, Herman Saettler, Eastern Regional Branch Chief, Division of Personnel Preparation, Bureau of Education for the Handicapped, U.S. Office of Education has provided quiet inspirational leadership from the project's beginning. His colleague, Thomas Behrens, Project Officer, Division of Personnel Preparation, BEH, USOE, has continued to give the project guidance and support. Since assuming leadership as Director of the Division of Personnel Preparation, BEH, USOE, Jasper Harvey has shown a genuine understanding of the problems and prospects of personnel education in New York State. Within the New York State Education Department, vision, leadership, and support for the project came from a very capable and committed person, Raphael F. Simches, former Director of the Division of Handicapped Children. Ronald D. Ross, Associate Coordinator for Regional Associates, Division of Supervision, provided a sound beginning to the project, unfailing support and wise counsel at every point along the way. Vincent C. Gazzetta, Director of the Division of Teacher Education and Certification, and the members of his staff provided cooperation that was borth excellent and exemplary. The project was fortunate in having an excellent Advisory Policy Board whose members realized that they didn't have all the right answers but certainly were honest in raising many of the right questions in representing a broad spectrum of the educational community in New York State:

Mrs. Alice Baker
NYS Association of Teachers of the Mentally Handicapped

Mr. Paul Dupuis
NYS School District Administrators

Mrs. Katherine Fanning
NYS Association of Special Education Administrators

Dr. William Floyd, Executive Assistant
NYS School Boards Association

Dr. Charles Mackey, Associate
Division of Teacher Education and Certification, NYSED

Mr. James Ward, Associate in Education Services
NYS United Teachers
(Currently Director of Economic Research
American Federation of Teachers
Washington, D.C.)

The "natural constituency" of the project was found in the forty-four college and university chairpersons and coordinators of special education

preparatory programs in New York State. To them and to the members of their consortia, the public school administrators, teachers, and in some instances, parents, students, and community members, acknowledgement is also gratefully noted.

A number of other people were involved in project activities and contributed significantly, each in his or her own way: Burton Blatt, Dean, School of Education, Syracuse University; Gail Ensher, Assistant Professor in Special Education, School of Education, Syracuse University; John Creamer, formerly Assistant Professor in Special Education, School of Education, Syracuse University; Satish Saroj, former Chairman, Department of Special Education, SUC Plattsburgh; William Penner, Director, CBTE Special Education Project, SUC Plattsburgh; Richard C. Towne, Chairman, Department Learning and Behavioral Disorders, SUC Buffalo. Marie C. Stein capably and cheerfully carried out the many secretarial tasks of the project.

Particular thanks are expressed to Patricia M. Kay, Professor, Department of Education, Bernard Baruch College of City University of New York and Principal Investigator of the Competence Based Teacher Education Project, Center for Advanced Study in Education, Graduate School and University Center of the City University of New York. Her contribution to project activities has been monumental; her most recent valued help has been with this report.

A final note of appreciation to Ted Andrews and Lili Bermant of Andrews-Bryant, Inc., Washington, D.C., whose assistance was invaluable in the preparation of this report.

INTRODUCTION

How can a final report not be a final report? It will be the purpose of this document to attempt an answer to this question. Or as Rilke posed it, "Do you not see how everything that happens keeps on being a beginning?" This final report is intended to synthesize the products and processes of a BEH funded project on Competence Based Teacher Education in special Education. Our aim has been to produce a document which chronicles past experiences with a view, wherever possible, to offering some directions for the future.

We believe our experiences may have particular relevance to the emerging roles and responsibilities of State Education Agencies under P.L. 94-142. In the Regulations for a Comprehensive System for Personnel Development, State Education Agencies are asked to provide technical assistance to local education agencies in personnel development. How this responsibility is to be met is not described.

In this report, we are attempting to make specific the "unspecified." The experiences of this CBTE project in special education may be an arch upon which to build future efforts in personnel development as collaboratively engaged in by all those interested in the education of handicapped children and youth.

The purpose of this report is to do something akin to what Abraham Maslow suggested to those involved in educational innovation and change:

> "In most such cases (experimental programs and schools) we wind up with a retrospective story of the program, the faith, the confident expectations, but with inadequate accounts of just what was done, how, and when and of just what happened and didn't happen as a result. . . . The real question is how we can make the best use of the 'natural experiments' that result when some courageous enthusiast with faith in his ideas wants to 'try something out' and is willing to gamble. . . . If only they were good reporters too . . . and regarded the 'write-up' as a part of the commitment!"

No attempt has been made to present exhaustively the processes and products of the entire CBTE project in special education. What is presented here is intended to represent only a sample of products developed, particularly for those interested in competence based teacher education. Processes are described only to the extent necessary to assist persons in understanding what we have found useful.

No suggestion of replication is intended; indeed, it is hoped that readers may avoid some of the pitfalls we fell into, and may profit from lessons we learned, both positive and negative. The ancient Greeks, it should be noted, deliberately built mistakes into their works lest too great a perfection offend the gods. In the project and in this final report we haven't worried about

making a conscious effort to imitate the deliberateness of the Greeks; we think we are covered on that item.

The project began in June, 1972, when the Research Fund of the Board of Regents of the University of the State of New York, through the Division for Handicapped Children of the State Education Department, was awarded a grant to explore the competence based hypothesis and its implications for teacher training, particularly with regard to providing alternative training strategies and models for the certification of teachers (The CBTE Project in Special Education). Funding support was provided by the Division of Personnel Preparation, Bureau of Education for the Handicapped, U.S. Office of Education. The original objectives of the project were to support CBTE research and development. An action of the Board of Regents in September, 1972 gave great visibility and immediate relevancy to the work of the CBTE project. At that time, the Board of Regents endorsed a competence based, field centered approach to the professional preparation of educational personnel, effectively mandating that college and university teacher preparation faculties actively pursue a competence based approach in the professional training and educating of prospective public school personnel.

New York State defines a competence based program of preparation as one which provides acceptable evidence of program formulation through the collaborative efforts of a consortium of representatives of colleges and universities, school district administrators and professional staff of school districts. So defined, a competence based system permits the widest variety of program design since it does not prescribe any set course or learning activities. A schedule established by the State Education Department's Division of Teacher Education and Certification called for all colleges and universities preparing elementary and special education personnel to submit competence based training program proposal plans by February 1, 1975, to be reviewed for program registration.

The Regents mandates facilitated the CBTE project policy board decision to widen the horizons of the CBTE project. The acquisition, development and evaluation of instructional materials and assessment techniques continued to be primary objectives of this research and development project. It had never been the intention of the CBTE project in special education to "sell" CBTE as the most viable alternative for teacher education programs. However promising the prospects of competence based teacher education seemed, or however serious its deficiencies, the primary objective of the project continued to be to explore the competence based hypothesis. The main focus shifted somewhat to allow for providing technical assistance to the consortia of forty-four institutions of higher education around New York State wrestling with the collaborative process of designing preparatory programs in special education.

With emphasis on assistance to the consortia in the development of their programs, the project sponsored, among other activities, three statewide conferences to which were invited the forty-four consortia. The proceedings of the first conference held in Glenmont, New York on May 14 through 16, 1974, was published under the title, *Design for Competence Based Educa-*

tion in Special Education. The proceedings of the second conference held in Glenmont, New York, October 29 through 31, 1974, have been printed under the title, *Assessment in CBTE: The Search for Evidence*. The proceedings of the third statewide conference were documented in *CBTE in Special Education: Competency Assessment*.

In order for readers not only to learn from these efforts but also to experience some of what occurred in New York State we have prepared the following report. The first section is written by the project director and represents his viewpoint. Section II analyzes survey data in which the educators who participated in the project report on how they feel about it. Section III includes excerpts from the three statewide conferences sponsored by the project and brief descriptions of several modules that were developed. In this section readers will be experiencing materials created through the project which highlight the issues and the controversies that existed during the project.

Joseph T. Gilmore
December 30, 1977

SECTION I

TECHNICAL ASSISTANCE

TECHNICAL ASSISTANCE

The purpose of the New York State CBTE Project in Special Education was "to explore the competence based hypothesis and its implications for teacher training, particularly with regard to providing alternative training strategies and models for the certification of teachers." In completing these tasks, we became deeply involved in two areas directly related to the rules and regulations governing P.L. 94-142: developing programs in a *collaborative* framework and providing *technical assistance.*

Rules and regulations for implementation of Part B of P.L. 94-142, Education for All Handicapped Children Act of 1975, published in the Federal Register, Volume 42, No. 163 on Tuesday, August 23, 1977, give each state educational agency the responsibility for the development and implementation of a comprehensive system of personnel development. 121a.381 states that, "The State education agency must insure that all public and private institutions of higher education, and other agencies and organizations (including representatives of handicapped, parent, and other advocacy organizations) in the State which have an interest in the preparation of personnel for the education of handicapped children, have an opportunity to participate fully in the development, review, and annual updating of the comprehensive system of personnel development."

121a.387 requires the State to provide technical assistance to local educational agencies: "Each annual program plan must include a description of technical assistance that the State educational agency gives to local educational agencies in their implementation of the State's comprehensive system of personnel development."

Definition

A major difficulty in discussing "technical assistance" activities is the lack of a concise definition of "technical assistance." Gallagher (1974) has furnished a serviceable one that has been helpful to us: "Technical Assistance may be defined as help from an outside agency designed to improve the competence of educational service delivery personnel by increasing their management, organizational or program skills, and/or their available information relative to their knowledgeable tasks of educational service delivery to students. A number of activities may be cited as falling under that definition of technical assistance: conferences, workshops, document production, document dissemination, provision for consultant services (internal, external), information collection, analysis, dissemination, skill training, advice on political strategies, and other."

Throughout its history, the project sponsored three statewide conferences, as well as regional workshops and meetings; produced documents distributed both nationwide and statewide; provided consultant services from subcontracted institutions of higher education and Boards of Cooperative Educational Services; collected information, provided some analysis and disseminated results; provided skills training in specific areas, and offered advice on political strategies and other aspects of pro-

gram development. Almost from the beginning, the CBTE Project in Special Education became much more of a technical assistance project than had been originally envisioned.

Collaboration

The unique feature of the CBTE Project in Special Education was the strong emphasis on collaborative program development and implementation. For many years a number of states have had some involvement with collaborative planning in special education, but a real impetus was given to such efforts in 1974 when the Division of Personnel Preparation of the Bureau of Education for the Handicapped issued a directive which would eventually result in each state giving evidence of the development of a statewide collaborative plan.

The CBTE Project, philosophically and practically has been committed to a systemic approach to the collaborative development of preparatory programs. The statwide policy board for the CBTE Project involved simultaneously all the elements of the educational community comprising the total system. All of the programs developed during this project were collaboratively planned. Technical assistance, therefore, always had as its major focus assisting in the development of collaborative special education programs.

Parallels

With state education agency personnel in every state now under P.L. 94-142 facing the challenge of offering technical assistance to special educators to help develop collaborative programs, the experiences in the New York State CBTE Project have implications far beyond its boundaries. There may be some helpful parallels emanating from this project.

Mandates of the Regents resulted in a broadening of the scope of the project. Assisting New York's special education community in discussing and formulating training program designs and components became the focus of project activities.

The "tooling up" process towards the competency mode in a collaborative way created a great bit of anxiety and, in some cases, not a little hostility. Making decisions related to competency identification, training, assessment of mastery, and validation is a highly complex, time-consuming and costly process, and can drain the energy of personnel resources. This was true even of those highly committed to such changes. As a result, many of the project activities were designed to assist consortia in identifying and resolving some of the initial difficulties encountered in delineating assumptions and establishing priorities within the general parameters of professional program planning.

Parallels may be suggested between the respective reactions to the Regents mandates and to the Rules and Regulations for the Implementation of Part B of the Education of the Handicapped Act. In both cases changes in present or past procedures must occur. Change generally induces stress. The usual reactions of an individual threatened by change in his or her personal or professional life are variously anxiety, hostility,

or denial—a whole cascade of fight or flight reactions. The responses of individuals when faced with change are mirrored in the patterns of organizations. Educational changes bring a variety of political responses, are always difficult, and are rarely accomplished in a hurry.

Institutions of higher education, public school administrators, and professional teacher organizations responded with unanimity, if not unity, generally with negative reactions to the CBTE mandates. They objected to the timetable which they viewed as unrealistic, to the process standards which they criticized for their lack of specificity, and to the lack of additional funds to meet the mandates contemporaneous with shrinking fiscal resources. The point is not to list the complex political strategies, conflicts and outcomes here; to some degree these have been documented and analyzed elsewhere. A major consideration to be noted is that the anxiety, hostility, and question fell clearly and relentlessly on the State Education Department's Division of Teacher Education and Certification, Office of higher and Professional Education, which was responsible for the entire regulatory and review process for preparatory program registration.

Because the CBTE Project in Special Education existed during this same period, much of its technical assistance efforts were designed to assist educators who had concerns about how to meet the state mandates. This history may be repeated in other states as educators try to meet the requirements of P.L. 94-142.

CBTE Project

From the beginning, the CBTE Project in Special Education was in a unique position. A Regents Research Fund project, it was housed in the State Education Department in the then Division for Handicapped Children, Office of Elementary, Secondary and Continuing Education. As the largest State Education Agency in the nation, the bureaucratic lines of responsibility and authority are clearly defined. The CBTE Project was not charged with any regulatory role. Cooperation by the Division of Teacher Education and Certification was always sensitively and generously given to CBTE Project staff. In as sensitive and professional a way as possible, project staff attempted to make clear to the field the important distinction between the regulatory role of the Division of Teacher Education and Certification and the helping relationship role of the CBTE Project in Special Education. Our judgment is that this distinction was, and is, very difficult for those outside the bureaucracy to understand and accept. Viewed monolithically, the State Education Department is the State Education Department. Within that monolith, there may be "good guys" and "bad guys" depending often upon who doles out financial assistance, who regulates, who applies regulations more or less humanely, etc. However, whether "good" or "bad" guys, they are viewed as members of the same team.

The difficulties encountered by the CBTE Project (timetables perceived as unrealistic, required program revisions without adequate financial support) may also be encountered by others during the implementation of the provisions of Public Law 94-142. These potential problems will be even

greater unless there is clear, constant delineation of the separate functions within the state educational agency. The State provides a variety of leadership roles. Historically, state functions have frequently been regulatory and operational. Leadership functions of planning, research, advising and consulting, and coordinating in the areas of support services were perhaps somewhat less usual. P.L. 94-142 charges the State with regulatory functions requiring monitoring activities to ensure free appropriate public education for every handicapped child. Technical assistance can be provided and, indeed, must be provided by the State educational agency in the area of personnel development; this should not, however, simply lead to a continuation of the traditional historical role of the state educational agency in filling regulatory and operational roles. Difficulties may arise if units within each state agency are not clearly labeled and accurately perceived as either regulatory in nature or essentially providing technical assistance.

Our experience leads us to recommend that those two functions, regulation and providing technical assistance, be assigned to two different units. While the personnel in both units need to coordinate their activities, it is essential that they see their function and their clients in different ways and, even more important, that the clients see the roles of these two units as different.

Technical Assistance Systems

A document edited by Reynolds (1975), provided some excellent guidelines on national technical assistance systems in special education. Reynolds reported on a conference exploring the conceptual framework and activities of a number of support systems, identifying common problems in the delivery of technical assistance and examining the critical aspects of support systems in general. Reynold's report, however, differs from this document in that it emphasizes *systems*, primarily at the national level, and not at the local, state, or regional levels. The focus of this report is on an individual state project with differing scope, purpose, and staffing. The activities reported on in this document emanated from one project director in the State Education Department who had the assistance of a full-time secretary. The project also had a Policy Board consisting of members who contributed their time and talents voluntarily and with the financial support of their sponsoring organizations. In addition, the project was able over its years of existence to obtain services from other agencies through subcontracts: three institutions of higher education and a Board of Cooperative Educational Services. Each of these groups, through the individuals in them, was generous in providing technical assistance beyond the terms of the formal subcontracts.

Historically, the provision of a free appropriate public education has been and continues to be the responsibility of state and local agencies. In recent years, the federal role in education has increased through the activities of the U.S. Office of Education. Public Law 94-142 has continued this thrust. The federal role, through BEH, may continue to be one of both monitoring and support through its various divisions, but the role of de-

livering technical assistance to local education agencies is a burden imposed on the state. In this context then, the experience of the CBTE in special education is germane to efforts by the states to deliver technical assistance in the area of development of personnel for handicapped children. This is not to overlook the vital and productive roles States have had historically in local, state and regional technical assistance delivery. It is to suggest that each State's role is in the process of being more clearly defined. If New York State is at all typical of State Education Agencies, a project director, VI-D coordinator, or whoever will have additional responsibilities and problems beyond that one project. Funds from the federal level as well as state resources are finite, but the resources available, however limited, should be proportionate to the roles and responsibilities assumed. There may well be a changing role of state departments in modern public school education. Traditional state functions (purely statistical, clerical, and regulatory in nature) may indeed be giving way to a greater variety of leadership functions. Among these, planning, research, advising and consulting, coordinating, and public relations may be more appropriate than merely the operational and regulatory stance.

Cautions

Recognizing the historical validity of local autonomy, the state departments are called upon to work as partners with local units in the development of superior special education services delivery. In the catchwords of the day, the State's role is increasingly proactive rather than reactive. There is a danger, however, that the State's rhetoric may outstrip its capacity for effective behavior. A State Agency may unrealistically promise more than it can possibly deliver. To raise expectations beyond reality is intellectually dishonest and ultimately counterproductive for handicapped children.

We would recommend that SEAs consider not only what should be accomplished but also what resources can be assigned to that task. If the resources are lacking, the expectations should be lowered. The SEA is clearly in a key and crucial liaison role between the federal and the local education agencies, as well as with a whole variety of other institutions and agencies concerned with the education of handicapped children.

Recognizing the differences referred to above between the national technical assistance systems delivery and the questions remaining about the typical State Education Agency role, the reader of the Reynolds document will still find much general information that will be of help in providing technical assistance. The preparer of this report acknowledges his debt to the Reynolds document and to the papers presented therein for many of the general technical assistance guidelines referred to in these next few paragraphs.

Principles

Technical assistance traditionally runs through the following cycle: Needs assessment, strategy development, delivery of assistance, and evaluation of effectiveness. Gallagher (1973) identified some general principles

that seem to fit many technical assistance programs:

1. *Communication for change works best when the individual requesting change, or who is expected to change, has a major say in the nature of the change itself.*
2. *Communication for change works when there is a common language between helper and helped.*
3. *Communication for change works best when the message does not contradict the basic values of the receiver.*

Argyris (1970) discussed the problems of trust between client and innovator in industry. These issues are certainly relevant to education. Mutual trust and respect between the providers of technical assistance and their clients can only be established if the helping person pays close attention to the client's stated needs, respects the client's views on the priority of problems, follows through on the request for services and maintains person-to-person contact. Havelock (1971), in his review of change-agent models, identified some of the major characteristics of one type of helping model similar to a technical assistance model in common usage today:

1. The user is the starting place.
2. Diagnosis precedes solution identification.
3. The outside helping role is nondirective.
4. Internal resources are important.
5. User-initiated change is the strongest.

Gallagher (1975) made a point that has clear relevance for State Education Agencies: "Further, the helping relationship involves a mutual respect and trust which may not be compatible with the monitoring role. It is easy to see that a local program whose existence may depend upon the favorable reaction of a supporting state agency will not likely bare its soul to the agency representatives in a needs assessment or in a statement of problems. Therefore, it is probably wise to suggest that if any sizable aspect of the agency's role in the program involves monitoring the program or decision-making on its future, the monitoring responsibilities should be separated from the technical assistance. In other situations, however, where the agency has no particular life or death decision-making power over the programs, restrictions or problems would not exist in such strong form. We are probably not wise enough in the use of these support systems to draw any general restrictions or rules that fit all cases, but it seems clear that one should be particularly careful in mixing the helping and monitoring relationships."

Communications

The experience of the CBTE Project in Special Education bears out the wisdom of Gallagher's statement. Helping relationships in the context of P.L. 94-142 should have clear, sharp lines of demarcation from the regulatory function. While the dispensing of funds clearly helps programs, such a function might better be placed among the responsibilities of the

regulatory/monitoring arm of the SEA. Stedman (1975) is also pertinent to this discussion: "A technical assistance (TA) system is most properly viewed as a communications network. Members initiate and maintain communication around specific problems and about strategies to solve the problems. Everything in the technical assistance system is directed toward the initiation and maintenance of this communication. The structure and function of the system are partly determined by the content or information the system is appointed to deliver, partly by the characteristics of the 'customers,' or client organizations, and partly by the character and style of the technical assistance organization's membership. Thus it is a constantly changing organization.

"In summary, the technical assistance system must develop and maintain effective intersystem communications with the parent organization of the client, the client organization, the parent organization of the technical assistance system, the funding agency of the technical assistance system, the funding agency of the client organization, 'agents' of the technical assistance system, client 'competition,' other client support systems, and other related formal and informal structures. In other words, major attention must be given to the communications and liaison aspects of the technical assistance system's activity. It may be costly in time and budget but it must be done if the technical assistance system is to be effective."

Questions

Clients will always have questions in an area of so much interest, as for example, the broad-based comprehensive system of personnel development called for by P.L. 94-142:

Who should be involved?
Who needs to be merely kept informed?
Who should deliver technical assistance?
To whom should it be delivered?
Who pays?
Who establishes needs?
How are needs determined?
How are decisions reached as to what are appropriate activities?
To whom is information disseminated?
Where is technical assistance to be delivered?
  State Capital?
  Regional Meetings?
  Local Meetings?
What is the process for timely scheduling of conferences?
How are communications delivered most adequately?
How most efficiently/effectively can one deliver the variety of possible technical assistance alternatives?

The CBTE Project in Special Education, as any technical assistance arm must, attempted to answer each of the above questions. The reader may find the process and degree of success in Section II. It may be noted here that failing to ask the above questions and/or responding unclearly

or only partially to them can result in serious gaps.

For example, at our first statewide conference in Glenmont, the policy board insisted that participants attend as consortia. That is, each institution of higher education received an invitation to send one faculty member, the public school administrator and the professional teacher organization representative from its consortium. In addition, they were allowed to bring a student, a parent, a community representative, a handicapped person, or another faculty member. The policy board's failure to insist that the professional teacher organization member be an officially designated member of the union resulted in near disaster. A very concerned, highly placed union official threatened to bring grief to many individual institutions of higher education, threatened not to participate in the CBTE programs, strongly remonstrated with the project director, and brought to the conference (when attendance had been worked out as amicably as possible) a strong set of negative feelings which deterred initial proceedings. The CBTE mandates already had a majority of participants in a strong state of anxiety and external hostility; in the aura of a shotgun wedding, we did not need any further arousal of negative feelings. What "saved the day" was our close liaison with the union representative on the Policy Board and his help in defusing the situation. The point is that involvement in technical assistance should recognize both the formal structure and the informal norms so necessary in any political context. Recognition of the "power people" who can get things done or who can prevent them from happening is essential. Formal and informal contacts with such people are vital. In deciding who should be involved and who should be informed, the provider of technical assistance would do well to have as extensive a checklist as possible. Schofer and McGough (1977) have furnished a checklist for involvement on the manpower planning committee in special education which is a helpful example.

Delivery

Lillie & Black (1975) listed several different methods used for the delivery of technical assistance services. They listed three broad categories of assistance according to where or how the services are delivered: (a) in-field technical assistance, (b) in-house technical assistance, and (c) in-print technical assistance. The size of the CBTE project staff allowed for relatively little in-field assistance. The in-field forums for technical assistance were the statewide conferences, regional workshops and institutes, and group meetings.

In-house technical assistance by the CBTE Project was far more common. Rather frequently the project director was asked to review and critique various written documents, particularly program plans. Far more frequently, the project director was used by the consortia as an informal liaison to the Division of Teacher Education and Certification and to various staff specialists within the then Division of Handicapped Children. More often than not, the questions that were raised related to information requests, procedural designs and political strategies. In this last area particularly, mutual trust and confidentiality were very important. Ac-

curacy of information and rapidity of response to these questions were sincerely appreciated by those seeking technical assistance.

Dissemination

With regard to in-print technical assistance, the project produced written documents and materials including monographs, annotated bibliographies, modules, field test results, brochures, flyers, newsletters which included materials emanating from the Division for Handicapped Children and occasionally from the Division of Teacher Education and Certification and/or occasionally from BEH; in short communications materials conceived as vital or helpful in the programmatic concerns of the consortia.

The dissemination of information at a time when new information and in some cases misinformation, was rampant, proved to be one of the most important functions of the project. Frequently, crucial materials were alleged not to have gotten down from a dean's desk or a superintendent's desk, so the project's direct contact, particularly with the chairpersons of special education departments, was helpful. One failure of the project was in developing a distinctive and periodic newsletter and/or letterhead which might have more clearly demonstrated project "ownership" in delivering the material.

Bringing Together

Perhaps the one area where the state has unique power in providing technical assistance is in its ability to bring people together. The Regents mandates, for example, had a tremendous influence on the professional lives and interests of a large number of people. New norms for the registration of programs, new relationships among groups, and new ways to share information have occurred among those concerned with teacher education during the five years since the Regents mandates. The CBTE Project in Special Education microcosmically facilitated the coming together of a number of people who had significant contributions to make to each other but who had not come together to share concerns, ideas, resources with as much vigor as had been the case before the mandates. More frequently than should have been the case, teacher educators had been insulated from public school administrators and teacher union representatives. The CBTE mandates brought together college faculty members who discovered gaps as well as overlaps in their programs. Inter-consortia sharing resulted in the opportunity for professionals to converse with colleagues about similar concerns. There are instances where small consortia banded together on a cooperative basis to pool their resources into cooperative programs, with students being allowed to take courses in a number of institutions of higher education.

Also, a recent study revealed that the major way in which successful educational practices are disseminated and adopted is through person-to-person contacts among people who have professional respect for each other. State sponsored conferences, workshops, and meetings, therefore, have significant potential for improving educational programs.

The chief vehicles for bringing people together on a statewide basis were

the statewide conferences sponsored by the project. These conferences provided an exciting forum for the often heated discussions and interchanges on various aspects of teacher education programs. A negative factor of "new people" attending each conference was a drawback in that sometimes consultants had to start at point zero; the positive factor was the "new blood" that new people provided.

Information

As hinted at previously, the chief technical assistance function performed by the CBTE Project was in the area of the dissemination of information. The survey in Section II points out rather conclusively that communication is the heart of the state education agencies' technical assistance role. If knowledge is power, information is the current which turns the power on. The dissemination activities previously described were a major function of the project.

As always happens, there were difficulties in communication. The Division of Teacher Education and Certification early on had severe difficulties when internal draft documents were disseminated publicly. One error the CBTE Project happily did not make was in releasing draft documents or any documents without permission of responsible parties. That is a good principle to keep in mind.

It was always necessary to make sure the field understood who from the state agency was communicating about what. The project director, in speaking or in print, consistently emphasized his "non-official" role. The Division for Teacher Education and Certification was always pointed to as the responsible agency concerning questions about teacher education and certification. This was important because people from the field tend to view the state monolithically. Also, because policy and procedural changes were instituted by the Division of Teacher Education and Certification as complex political and programmatic processes dictated, the project director was not always immediately aware of such changes.

Continuity

A communication problem which plagued the project was the question of continuity since, as our survey revealed, the average tenure of chairpersons of the departments of special education is currently 5.5 years, twenty-one chairpersons being on their job two to five years and four others being in place less than two years. What was true of conference attendance and the necessity for beginning again was also true of some leaders in the consortia.

This fact, the role changes in persons who are part of the state's client system, needs to be emphasized. Any communication system established for technical assistance should consider the problem of how one brings new persons up to date. We don't have answers for this because we did not recognize it as a possible problem. The survey brought this concern to our attention, and it is included in our list of "Are there any things you would do differently?"

Cost

Another problem in dissemination obviously is cost. The project produced a series of six excellent modules. The cost of duplicating them, other than providing one copy for each of the consortia, was prohibitive.

Our approach to dealing with this problem was to submit them to ERIC which could then make the materials available to interested educators. Timeliness of information to be disseminated was also a crucial consideration. The project staff made every effort to get documents out to people as quickly as possible and with the exception of the third statewide conference, generally had excellent turnaround time.

A final consideration in the dissemination of information relates to the whole host of internal bureaucratic problems, perhaps limited to a large bureaucracy. Frequently, materials which are regarded as official have to go through a whole series of approval steps that cause frustrating delays.

An even greater problem is seeing that everyone who should be informed is, in fact, informed. SEA personnel (and most other educators) are often overburdened with conflicting responsibilities all of which should be finished today; they travel constantly and most in-baskets are at least a foot high. The fact that information has been sent out does not guarantee that it has been read.

Project Director

A corollary consideration to dissemination of information which is at the heart of a SEA's technical assistance program is the capability of the project director. There is an obvious need for the director to have time and opportunity to study, to interact with other concerned professionals, to attend conferences, workshops and the like, and thus to stay fully informed on a whole host of issues within the field of special education in general and personnel development in particular. No matter how responsive a project person might be, he/she will be performing a valuable function only to the extent of being able to make informed, intelligent, and articulate responses to requests for help. The project director must also be sensitive to a variety of ethical problems arising from his liaison role. He/she will have access to privileged information from a number of different sources relative to policy, institutional workings or individual strengths and weaknesses and must be careful to maintain confidences when necessary and share what is possible whenever possible. The person who provides technical assistance from an agency where others have monitoring and regulatory responsibilities runs a further risk of temptation to be the "good guy" at the expense of those "bad guys." It is almost with a sense of embarrassment that these truisms are mentioned; however, even one slip in ethics might very well prove hopelessly damaging to the mutual respect absolutely crucial between a consultant and client and the other linkages to and from and within an SEA.

Perhaps a person from a state education agency must make particular efforts related to communication. Frequently the state has been in a role of telling; true communication calls for the state to be asking what is

needed and to be listening carefully to the responses. One respondent to the survey question as to how the SEA might best offer technical assistance exclaimed, "Wow, thanks for asking."

The distinctions between the regulatory function and the technical assistance role are again illustrated in this area. The regulatory office often communicates by telling; the technical assistance office through listening.

And then there is the old story about the three greatest lies: number one is, "I'll still love you as much in the morning"; second one, "The check is in the mail"; and the third, "I'm from the State Education Department; I'm here to help you."

Enforced Collaboration

More research needs to be done before a definitive answer can be given to the productivity and/or wisdom and/or possibility of enforced collaboration. The substance of the CBTE mandates calling for a new sharing of power may be quite different in substance from P.L. 94-142 and the Rules and Regulations for the implementation of Part B of the Education of the Handicapped Act. The question of timetables for implementation and the difficulties of meeting timeliness, however, may be parallel. So, too, is the general context: one of radical change in thought and practice. The problems of CBTE and P.L. 94-142 are also related in sharing eras of diminishing financial resources in one sense and the teacher surplus personnel problem in another. While general education suffers more particularly from this latter syndrome, it is a fact that for the first time many institutions appear to have a surplus in various areas of special education, and there may be an unnecessary and wasteful duplication of training efforts in some areas and woeful inadequacies in others. For those interested in the quantity and quality of personnel, the comprehensive system of personnel development is the single most crucial area of P.L. 94-142.

P.L. 94-142 places the responsibility for the development and implementation of a comprehensive system of personnel development clearly upon the State Education Agency. As the CBTE mandates in New York State provided, so too the SEA, under P.L. 94-142, must bring about collaboration of all interested parties in the development, review and annual updating of the comprehensive system of personnel development. Coordinated, comprehensive planning is an obvious necessity for the most accountable use of resources and the preparation of personnel. A State Education Agency can play a key role in seeing that leadership activities are coordinated effectively and efficiently. The State Plan role in P.L. 94-142 is but an extension of the historical and legal role of the state in the education of its children. But there are other facts of history to contend with. State Education Agencies are bureaucracies, and bureaucracies indulge in depersonalizing, self-serving, self-preserving, and self-extending activities. The state's role can easily devolve into an adversarial role rather than a collegial one. In enforcing collaboration and in providing technical assistance, the SEA can easily destroy the consultant/client compatibility needed for healthy collaboration.

This era of profound change and new responsibilities clearly calls for a spirit of humanistic professionalism. It will demand our constant efforts towards an ever deeper understanding, an ever widening acceptance, and a never failing good will in the processes, problems, and promises lying before us.

Conclusion

In conclusion, what would we recommend:

1. The regulatory and the technical assistance functions of a state education agency should be administered through separate offices.
2. Communication is the major technical assistance contribution that a state education agency can make. Both our personal opinions and the survey included in Section II support this conclusion.
3. In order to provide the needed "communication," careful planning needs to take place. A variety of formats are necessary: letters, meetings, memos, newsletters, and phone calls.
4. The major item that needs to be communicated is, "What decisions are other people making that relate to me?" In New York State, it was necessary to be constantly aware of and fully understand plans as they were being developed by the Division of Teacher Education and Certification. In responding to questions about P.L. 94-142, state education agency personnel need to be completely informed about decisions made by the Bureau for Education of the Handicapped as they relate to programs being developed within each state.
5. In order to meet this need for detailed state and national information, the state agency persons charged with the responsibility for technical assistance should spend a significant amount of their time at national and state meetings and/or conferences and, if possible, they should have a personal contact at BEH with trips to Washington planned several times a year.

Finally, we would be pleased to share both materials produced during this project and/or more detailed accounts of our personal experiences with interested persons. Special education programs in New York are different than they were in 1972 (hopefully better) due in large part to efforts of a state education agency in which one office instituted regulatory change strategies while another office offered technical assistance.

SECTION II

SURVEY

SURVEY

Shortly after the Competence Based Special Education Project was established, the New York State Education Department mandated the development of competence based teacher education programs in all fields. These programs were to be implemented over a five-year period, with February 1, 1975 established as the deadline for submission of new proposals in the field of Special Education. Under the new guidelines, the CBTE proposals required the formation of a consortium to develop and administer the overall program. These consortia, which operated as policy boards, included as representatives teachers, college faculty, and school district administrators. This arrangement is still in effect in New York State teacher training institutions.

In providing technical assistance, we of the New York State CBTE Project, proceeded under several basic assumptions which were related to the realities of program development in New York State at that time. Two of these assumptions were that technical assistance could most appropriately and effectively be provided by (1) sponsoring workshops and conferences, and (2) developing and sharing materials, such as teaching modules and conference and field-test reports with local projects.

With the CBTE Project in its final stages, it seems appropriate at this time to take a look at past efforts with an eye to future improvement.

In order to gather information enabling us to take that backward look, and to determine the most effective way a state agency might, in the future, provide technical assistance to educators of children with special needs, a telephone survey was carried out. The object of the survey was, in part, to ascertain how helpful the CBTE conferences and materials had, in fact, been to the people directly involved in the development of the CBTE program. Sixty chairpersons of specialized teacher education programs in 47 different institutions throughout New York State were included in the survey. Their opinions and suggestions regarding the CBTE Project were solicited.

The calls were made over a three-week period beginning October 4, 1977 and ending October 25, 1977. Of the 60 persons on the original list, four were no longer connected with their institutions, four could not be reached, and 52 responded to the following survey questions:

TELEPHONE SURVEY

1. *How long have you been responsible for the Special Education program?*
2. *A series of conferences was sponsored by the Special Education Project. Did you, or others from your program, attend any of the conferences? Which ones?*
3. a. *By the time the first conference was held, were you working as part of a consortium? If so, how long?*

b. Are you still working as a consortium?

c. Did the same people participate each time?

4. *a. Did you and others who attended with you find the conference helpful?*

b. Specifically, could you state what you found helpful?

c. Did you meet anyone at the conference(s) who was particularly helpful?

d. How did you share what was learned at the conferences?

5. *To what extent were you or others with you familiar with Competency Based Teacher Education before the conferences?*

6. *In addition to sponsoring the conferences, the Special Education Project provided materials to you such as the conference reports, the modules, and the field-test reports. Were these useful? How were they used?*

7. *From your perspective, how do you feel the State Education Agency might best offer technical assistance to you and others involved in educating children who have special needs?*

8. *Is there anything I might have asked and did not and to which* you *would like to respond?*

In tabulating the results of the survey, the questions were consolidated into four categories:

A. Background information
Questions 1, 3, 5

B. Feedback about the conferences
Questions 2, 4

C. Information about materials provided
Question 6

D. Suggestions and comments regarding the State Education Department's role in offering technical assistance
Questions 7, 8

A working definition of *technical assistance* was formulated to encompass: conferences; workshops; document production and dissemination; consultant services; information collection, analysis and dissemination; still training; political strategies; and other.

Because not all people responded to all questions, totals do not necessarily match each other or the figure representing the full contingent of people reached in this survey.

A. Background Information

1. How long have you been responsible for the Special Education program?

Of the 41 people who answered this question, one had been in the post of chairperson as long as 25 years, and four had held it for less than two years. The average tenure came to 5.5 years, distributed as follows:

(Length of time responsible for the Special Education Program)

25 years	1
10-15 years	7
5-10 years	8
2-5 years	21
Less than 2 years	4

3. a. By the time the first conference was held, were you working as part of a consortium? If so, how long?

All but four of the 42 respondents' programs were operating as part of a consortium by the time the first conference was held, most of these having been formed as a result of the New York State mandate.

Of those, one had been in existence for 10 years; two, as trial projects, had been operating for several years; seven for at least one year; and one was as yet informally constituted.

b. Are you still working as a consortium?

Most programs were continuing to operate as a consortium, albeit at various levels of activity. Two admitted to being "not at all strong," and two pointed to lack of quorum and union problems for the total inactivity of their consortia. Four institutions had multiple consortia serving different programs as follows:

(1) • Learning behavior disorders
- Communicable disorders
- Mental retardation and physical disabilities

(2) • Deaf
- Blind
- Special education

(3) • Special education (elementary)
- Special education (secondary)

(4) • Mental retardation and learning disabilities
- Deaf education (Masters')
- Severely and profoundly retarded
- Visually handicapped (formulated)
- Early childhood—elementary and special education (being planned)

c. Did the same people participate each time?

The overwhelming response to this question was "no" or "not necessarily," with only two stating that the participants were essentially the same, and two saying that they were, in fact, the same people each time.

5. To what extent were you or others with you familiar with Competence Based Teacher Education before the conferences?

The answers to this particular question ranged anywhere from "not a bit" to "extremely well," with most responses resting somewhere in between. Approximately 18 answers could be grouped in a category represented by the word *vaguely*, but also including such statements as mini-

mally, somewhat, superficially, very little, concept not entirely new, slightly, not familiar, not too much, not very.

The next grouping, represented by *fairly familiar*, and including: somewhat, moderately, reasonably well, through readings, some knowledge, numbered 9 people.

The third category, which started at *quite a bit* encompassed such terms as: well-versed, quite involved in module development, extensively involved in CBTE, concept permeates my field, very familiar, represented the background of 20 of the respondents.

B. Feedback on Conferences

2. A series of conferences was sponsored by the Special Education Project. Did you, or others from your program, attend any of the conferences? Which ones?

Approximately 29 of the chairpersons polled attended at least one of the Special Education Project conferences, while several who did not attend obtained some feedback about them from members of their respective consortia. Twenty-four people could remember having attended Glenmont I; 20, Glenmont II; and 10 went to Plattsburgh.

4. a. Did you and others who attended with you find the conferences helpful?

Twenty-three of the 29 participants who attended at least one conference found the conferences helpful (or very helpful) with one of them commenting: "I could not give Glenmont [I] enough stars. We could not have gotten our program off the ground without it." Five participants found the conferences not particularly helpful (not advanced enough, too much political infighting), and one answered with a categorical "no."

b. Specifically, could you state what you found helpful?

This question generated a wide variety of responses which were tabulated in the order of the frequency with which they were mentioned by the participants.

• Sharing concerns and ideas	13 mentions
• Contact with other people in the field	8
• Clarification of CBTE	8
• Clarification of PL 94-142	4
• Exciting, very stimulating	4
• Good discussions	4
• Helpful with proposal	4
• Guidelines for CBTE management	2
• Explanations	2
• Show general participation in development and implementation of CBTE	2
• Good to be away from desk	2
• Good communication	2

Mentioned at least once were the following:

- Planning assistance
- Leadership
- Materials and presentations
- Help with problems
- Responded to need
- Good spinoff from conference

c. Did you meet anyone at the conference(s) who was particularly helpful?

While many of the participants could not recall the names of specific people who had been helpful, several stated that this did not necessarily mean that there had been none. Those who did remember, mentioned the following names: Joe Gilmore (9); Bill Boyd (2); Vince Gazzetta (2); Pat Kay (2); Paul Pottinger (2); Jim Strauch (2); Ed Blackhurst (2); Bob Brinkerhoff (2); Bill Penner; Mimi Gordon and staff; Bernice Kipfer; Alice Dollard; Hugh Baird; Betty Ward; Fred McDonald; Bill Tikunoff; Dr. Phillips from Fordham; Bob Houston.

d. How did you share what was learned at the conferences?

In most instances, the information acquired at the conferences was shared at faculty meetings following the participants' return to their colleges and universities (16 mentions). This may have been done informally (8) or at formal meetings (2), shared with others involved in CBTE (8) or with members of the consortium (5). In some cases, sharing was done through memos and summaries of the proceedings (3) or via direct work on the proposal (2). A few participants also shared the information at the Board meetings of the Executive Committee (3), while one respondent specifically made mention of the participating school district as being involved in the sharing process. Another participant mentioned talking with teachers and principals in their own schools as a means of sharing what was learned at the conferences.

One person who had not attended any of the conferences mentioned he learned about the content of the sessions through a member of his consortium who had attended and had taped the proceedings for just that purpose.

C. Information About the Materials

6. In addition to sponsoring the conferences, the Special Education Project provided materials to you such as the conference reports, the modules, and the field-test reports. Were these useful? How were they used?

Of those chairpersons familiar with the materials, most (26) participants found them very helpful (excellent, the most helpful element of the conference). Four considered them just fairly helpful, and three not especially helpful.

In some cases, these materials were shared with and distributed among staff and students where they were used in training courses and to generate ideas in planning sessions. They also served to update the non-professional

members of consortia, and as models in establishing formats for specific modules. Some materials were used for comparison with existing resources or as the basis in the preparation of CBTE proposals. Six participants particularly mentioned the modules as having been most helpful, among others the ones which treated the subject of how to deal with parents.

By far the most frequently mentioned way in which the material was utilized was for it to be made generally available as resource material in a comprehensive bibliography of CBTE references.

Specifically mentioned:

- Blackhurst materials on competence and special education
- Hunter College material on parents
- Florida material
- Dr. Kay's material
- John Creamer material
- Material on competencies in special education

D. Suggestions and Comments Regarding the State Education Department's Role in Offering Technical Assistance

7. *From your perspective, how do you feel the State Education Agency might best offer technical assistance to you and others involved in educating children who have special needs?*
8. *Is there anything I might have asked and did not and to which you would like to respond?*

The more than 230 responses which the above two questions generated were tabulated under 14 headings which evolved as the answers were read and analyzed, and grouped according to similarity of thought. Below, listed in the order of the frequency in which they were mentioned, are the 14 categories.

1.	Communication	39 mentions
2.	Workshops and Conferences	34
3.	CBTE (as a concept)	29
4.	Assessment and Evaluation	22
5.	State Education Department (as an agency)	20
6.	Consultants and Resource Persons	14
7.	Documentation and Materials (Dissemination of information)	13
8.	Teacher Training and Inservice Needs	13
9.	Speech and Audiology; Physical Education (their integration with Special Education)	12
10.	Certification (Accreditation)	9
11.	Needs Assessments	9

12. On-site Visits (by someone from State Education Department) 9
13. Legal, Political, and Legislative Strategies (Role of State Education Department) 8
14. Unions 5

Since these 14 headings do not in any way represent the variety of the responses, a number of statements were collected which would, as best as possible, reflect the different points of view expressed. Again, a certain amount of grouping for similarities was done, but it is nevertheless hoped that the position of each of the people contacted is at least represented.

1. *Communication*—39 mentions
   - More two-way communication needed.
   - Is everyone getting the same information?
   - Need for better elucidation of criteria before mandate.
   - Clearer terminology regarding learning disability and mainstreaming.
   - More input from special education people should have been solicited.
   - Better articulation among different agencies and universities is necessary.
   - More positive inputs from State Department.
   - Improve awareness about what is happening throughout state and within State Education Department.
   - Is help going where it is needed?
   - We should not work in fear because of lack of information.
   - We should not have to get information through grapevine.

   Suggestions offered:
   - Regular monthly newsletter.
   - Regular monthly meetings of representatives from all universities and colleges and State Education Department.
2. *Workshops and Conferences*—34 mentions
   - Regional conferences (lack of time and money to travel far and stay overnight).
   - Share ideas and problems.
   - Specific issue conferences (e.g., early childhood).
   - Interdisciplinary meetings.
   - Joint meetings with students.
   - Workshop on evaluation.
   - Should be held during school year.
   - Should not be held during school year.
   - No workshops—they take away from primary duties.
3. *CBTE* (as a concept)—29 mentions
   - Complex concept difficult to implement.
   - Good concept, but staff is overwhelmed and overworked.
   - State should provide better guidelines and direction.
   - Logistical support is needed.

- Pressures cause high anxiety level among staff and students
- Neither the State nor schools have adequate funds to implement concept fully (not for R&D)
- Implementing CBTE is a heavy burden of time and money.
- State should support the costs of the mandate.
- Technology for full implementation is as yet not available.
- Initial assistance and ambivalence toward concept; imposed from the top.
- Is the State sold on CBTE?
- Special Education Project did outstanding job in helping development and implementation.
- Is the State really sold on CBTE?
- Has not added in any significant way to Teacher Education.
- Has been beneficial and has produced more self-confident teachers.

4. *Assessment and Evaluation*—22 mentions
(Both of students and of program)
   - There is need for constant re-evaluation.
   - Validation.
   - Great need for adequate instruments.
   - Need for meaningful outcome criteria.
   - Not enough resources and manpower available.
   - Accountability.

5. *State Education Department* (as an agency)—20 mentions
   - Should be more consistent.
   - Should pull themselves together before demanding that schools deliver.
   - Don't know what they are doing.
   - Too many demands take away vital resources.
   - More specificity; what is applicable in one program does not necessarily fit another.
   - What is educational philosophy of State?
   - Provide help to schools in making program compatible with what is really happening.
   - Has been most helpful.
   - In spite of difficulties, there is progress.
   - Integration among Federal-State-LEA-Campus is necessary.
   - Should be more aggressive in providing leadership and formulating policies.
   - Should pressure local school districts to work with colleges.
   - Is doing fine as it is operating.
   - Do they *really* know what is involved?

6. *Consultants and Resource Persons*—14 mentions
   - Someone to call at State level (continuity).
   - Provide consultants schools can afford.
   - State should utilize skills and expertise of people within universities and colleges.

7. *Documentation and Materials*—13 mentions
(Dissemination of information)
   - Need for better sharing of available material.
   - Create a clearinghouse to facilitate access to new publications and ideas as they appear.

8. *Teacher Training and Inservice Needs*—13 mentions
   - More emphasis on affect.
   - Need for internships (like MDs)
   - State funds should be made available.

   Suggestion offered:
   - State could sponsor and finance mini-sabbaticals (5-10 weeks) for intensive training and upgrading.

9. *Speech and Audiology; Physical Education*—12 mentions
(their integration with Special Education)
   - Need guidance from State Education for better integration.
   - Provide help on legislation.
   - Need for permanent resource person in Bureau for Handicapped.

10. *Certification* (Accreditation)—9 mentions
   - How can pencil/paper test be compatible with CBTE?
   - Great need for consistency in requirements.
   - Certification should accurately reflect emphasis of program.

11. *Needs Assessment*—9 mentions
   - Demographic study for distribution of special education needs.
   - How and by whom will program be funded?
   - Future personnel requirements.
   - Future job availability.
   - According to figures, only 50% of handicapped are in a program. Are others not being helped, or do they not exist?

12. *On-site Visits*—9 mentions
(by someone from State Education Department)
   - Lend credibility to program.
   - Input.
   - External evaluation of students and program.
   - Better one-to-one contact.

13. *Legal, Political, and Legislative Strategies*—8 mentions
(Role of State Education Department)
   - What is impact of PL 94-142?
   - State should separate politics from finance.
   - Parents come to meetings with lawyers—staff not sufficiently informed to deal with that.

14. *Unions*—5 mentions
   - Lack of acceptance of CBTE concept.
   - Boycott consortia.
   - How to work with unions.

SECTION III

PUBLICATIONS

PUBLICATIONS

This section includes materials from three statewide conferences sponsored by the Competence Based Teacher Education Project in Special Education. Also included are descriptions of several competence based modules developed during the project.

The materials included in this section are representative of those produced by the project. In each case the entire proceedings have been made available to interested parties. The following quotations are designed to give readers a sense of what the main issues were (and/or are). They have been excerpted from longer articles. Interested readers may find more lengthy treatment of the two conferences on assessment in the March-April, 1978 issue of the *Journal of Teacher Education.*

Abstracts of each of the statewide conferences and the modules developed through the CUNY/CBTE project in special education have also been entered into the ERIC system and are now available from this source.

Conferences:

Design for Competence Based Education in Special Education ED 107 049 EC 072 650

Research Bases for Performance-Based Teacher Education Options: Supplement to Design for Competence Based Education in Special Education ED 111 155 EC 073 549

Assessment in CBTE: The Search for Evidence ED 117 901 EC 081 253

CBTE in Special Education: Competency Assessment

Modules:

Modality Linking: Selection of Activities and Materials
Module: ED 129 790

Interpersonal Perception
Module: ED 129 791
Answer Key: ED 129 792
Pre-Assessment: ED 129 793
Post-Assessment: ED 129 794

Instructional Modules for Training Special Education Teachers: A Final Report on the Development and Field Testing of the CUNY-CBTEP Special Education Modules. ED 129 796

Parent Involvement in the Education of Young Handicapped Children
Module I: Family Reaction to the Handicapped Child
Module: ED 129 797
Instructor's Manual ED 129 798

Module II: How Parents Can Help
Module: ED 129 799
Instructor's Manual ED 129 800

Module III: Parents as Partners: Home-School Plans
Module: ED 129 801
Instructor's Manual ED 129 802

An extremely limited number of the conference proceedings documents are available from the Director of the CBTE Project in Special Education. Single copies may be obtained, until the supply is exhausted, by writing to: Joseph T. Gilmore, Coordinator, Comprehensive Personnel Development Project, The State Education Department, 55 Elk Street, Albany, NY 12234.

DESIGN FOR COMPETENCE BASED EDUCATION IN SPECIAL EDUCATION

Excerpts from Conference Proceedings
May, 1974
Glenmont, New York

Published by
Teacher Education
Division of Special Education and Rehabilitation
School of Education/Syracuse University

JOHN J. CREAMER, Division of Special Education and Rehabilitation, Syracuse University, and
JOSEPH T. GILMORE, Division for Handicapped Children, New York State Education Department:

The questions of how and why people differ in the effectiveness of their teaching have been of great concern to educators for many years. However, a review of the research traditions accompanying attempted resolution of these important questions reveals little in the way of developmental continuity. Findings and recommendations about the competence of classroom teachers have been sketchy and generally inconclusive. Surprisingly, while we know a great deal about learning and the conditions under which it flourishes, we know significantly less about the relationship between the teaching act and the acquisition of certain desired learner outcomes. Thus, even today, we are in the unenviable position of not being able to draw substantive inferences which universally define, identify, and assess teaching excellence.

RAPHAEL F. SIMCHES, Division for Handicapped Children, New York State Education Department:

I also hope that in the discussions we do not confuse certification and a desire of looking at competencies. I think we need to look at competencies as we have in the past. After all, our undergraduate programs, our graduate programs assume certain competencies will be imparted to teachers and so this is really a look at "once again," a reassessment, if you will, of those competencies. We do know that young teachers express a dissatisfaction with the type of education they have received. We know that school administrators have expressed dissatisfaction with the products that come into their schools. So there have been undercurrents of concerns about the skills that teachers come equipped with to the public schools. And we also, in terms of special education, have to review our teacher training programs to see if they are consistent with what we believe to be the new trends in special education: the trend towards the generic term of "mainstreaming"; the desirability for the teacher working with handicapped children to be more than just the special class teacher, but to have those competencies which might avail her or him to the rest of the school community as a resource person. We are concerned with the legal rights of children. We are concerned with advocacy. We are concerned with a lot of important issues that may or may not be part of a training program now for teachers. Maybe there are new competencies that teachers must have as they go into the educational world. The whole issue of accountability, the development of instructional objectives, criterion assessment, all kinds of new words—maybe they are new words to old concepts. Perhaps

this is something the group can be concerned with. Do we really have just a new language and style with the old concepts? I don't know if that is quite true; I think it's not. I think we have a new language for fresh, new ideas. I think that the language needs to be defined so we can convey the thoughts and the concepts. I think we'll do a disservice to all of us if language and words begin to lose their specificity and so we'll create a tower of Babel where we'll have many languages but no communication. Certainly that is not desirable. I'm sure that the forces of communication which will be created at this meeting and the proceedings that will come out of it will probably resound in many areas. I hope that is so, because I think what you do here is and will be significant.

HERMAN SAETTLER, Bureau of Education for the Handicapped, United States Office of Education:

Our Division's role in fostering the development of competency specification and programming has been for the most part by chance. That is, we have left it up to each program individually to overcome the problems surrounding the specification of what is being done in terms of teacher preparation. As more states begin moving toward discussion and implementation of CBTE, which also may involve certification, but not necessarily so, we'll need significantly increased cooperative planning. We, as a profession, are no longer in a position to have random cooperative planning. The alternative to planning, as suggested by Gallagher, is chaos. Congress, state legislatures, parents, the courts, and others will no longer allow the field of teacher education, i.e., the process, to proceed without cooperative planning....

Until we can define the effectiveness of program graduates in facilitating the educational progress of handicapped children, our efforts for those children in terms of full educational opportunity will continue to be programmatically useless. You are at a threshold of providing added direction and definition for all children, for all teacher education programs in terms of the needs of the individual child.

As someone remarked the other day, to specify does not mean to negate or compromise humanistic educational programming. On the contrary, greater definition and specification of program goals, experiences, and assessment must be given to document and further our developmental efforts in terms of individualized and humanistic educational approaches for all children.

In urging the development of a national goal of full educational opportunity for handicapped children and youth by 1980, we are attempting to provide a concept which can bring unity to local, state, and federal education efforts. Helping to assure the intrinsic right of children to an education in the United States may be as simplistic or as complex as we'd like to make it. However, we must keep in mind that if even one child is excluded from school, we are all excluded. When a child is denied his rights in terms of education or other rights, all ours are lessened.

MAYNARD C. REYNOLDS, Department of Special Education, University of Minnesota:

The most dramatic development in special education in the past two decades has been the judicial extension of the Fourteenth Amendment to handicapped children.

1. The "right to education" directives now flowing from the federal courts unequivocally mandate that all children—even the most profoundly handicapped—are to receive an education.

The clear implication of these adjudications is that we must prepare and supply the needed teachers and other staff to conduct programs for severely and profoundly handicapped children. However, very few colleges and universities are adequately prepared at this time to do this job well. Nor should all colleges try. Some school districts may wish to take care of their manpower needs without involving colleges. . . .

8. It is quite clear that the training activities designed to meet the new and emerging needs will need to be weighted toward an inservice rather than a preservice format. Many school districts are already "over supplied" with teachers in a general sense; rather than recruit a totally new staff for innovative and expanding programs, the districts may wish to redirect their present personnel into new roles. . . .

12. The situation is further complicated by the PBTE mandate in your state. It raises difficult technical and political questions. PBTE has great sex appeal. Political leaders want more of it than professionals are able to deliver—somewhat as in the massive demands for "evaluation" which came with the ESEA in 1965. We were caught with an ideology well ahead of our technology.

May I suggest a view of PBTE which may be oversimplified but which helps me to avoid some anxieties? Doesn't it involve mainly two things?

1. Being explicit, public, and sensible about the objectives of our teacher education programs.

2. Using criterion-based procedures to assess competencies. These ideas of being clear about objectives and assessing their attainments carefully, come from many sources besides PBTE. One of the problems with PBTE is that many of its advocates and early examples brought in so many other elements of doubtful relevance to their central ideas.

A. EDWARD BLACKHURST, Department of Special Education, University of Kentucky:

It is important to recognize two realities with respect to CBTE development that are present in the overwhelming majority of colleges and universities. First, there are usually insufficient fiscal, personnel, and support services to develop and implement CBTE programs in a completely ideal fashion. Secondly, there are a number of institutional regulations that are incompatible with some aspects of CBTE programming. Both of these realities present barriers and constraints which necessitate certain compromises. . . .

SUGGESTION: *Develop a mission statement to serve as the basis for all departmental activities, and do it before anything else.*

The mission statement serves as (1) the philosophical and conceptual underpining for all major activities within the department, (2) the basis for decision making with respect to long-range planning and development, and (3) a guide for the role of faculty members in the implementation of the mission. The following criteria are useful in guiding the development of the mission statement:

1. The mission should specify the context within which the department operates in order to identify the major forces to which it responds in meeting special education needs.
2. The mission should specify the major responsibilities that have been assigned, or which the department has accepted, with respect to each of the agencies or groups with which it interacts.
3. The mission should include a specification of goals. These are broad, general statements under which can be subsumed specific objectives and subsequent priorities.
4. The mission should include statements of administrative objectives. These will (a) reflect the commonalities that the department has with other departments of special education, (b) identify the uniqueness of the department, (c) be specific enough to form the basis for programmatic decision making, (d) be broad enough to subsume the activities of the programs within the department, (e) provide sufficient flexibility to permit program modifications and growth, and (f) include both product and process objectives to provide a specification of both what faculty do and how they do it.

W. ROBERT HOUSTON, College of Education, University of Houston:

In planning for change, several principles related to people seem to be relevant. The first one is: *Provide opportunities for the exploration of CBE and other basic ideas by those involved in the process.* In Houston, after we had been working on the program for nearly a year with commitments from the dean and administration but questions from a number of faculty, we held a one-day retreat. At a nearby motel, we openly explored the meaning of CBTE and its implications. We began by asking the question, "What are the questions you have about Competency Based Teacher Education?" These questions were written individually; small group and general discussions were then held. A panel answered questions. Several papers were available for reading. . . .

The second principle is: *Provide opportunities for people to be involved to the extent that they wish.* Not everybody wants to design the program. Some only want to be apprised of progress or to be involved in basic decisions. In the Buffalo report available at this conference, William McGee cites four levels of involvement. The first is called, "conduct the task"; the second, "consult about the task"; the third, "approve the task"; and the fourth, "be informed." Not everybody wants to conduct every task in

your special education program; but everybody does want to be informed. Those who are not informed tend to be negative about the process and results. . . .

The third principle is: *Provide continual opportunity for feedback and reorientation.* New people join the team. Others gain new perspectives and interpret program components and ideas differently. Continual re-establishment of program elements is also necessary as various parts are more explicitly defined and refined.

The fourth principle is: *The reward system must be consistent with the program objectives and program outcomes.* For example, we have finally convinced the university that modules ought to be recognized as publications. Writing and research are increasingly important for promotion in our college. Rewards must be accorded faculty for energy and outcomes related to program development. At the University of Georgia, there literally are dozens of publications and each includes the names of the people who were primarily responsible for writing it and those who contributed to it.

The reward structure takes many forms: trips to conferences such as this one, mentioning contributions in faculty meetings, paying tribute to the people who are expending extra efforts, or a simple gesture of appreciation. Since different folks require different strokes, use of a wide variety of carefully selected and appropriate positive reinforcers is important.

JAMES D. STRAUCH, Department of Educational Psychology, University of Connecticut:

In designing this project it became abundantly clear that relatively little had been done in identifying the skills, specific functions, or competencies of cooperating teachers. This was true in both general and special education. Yet, the centralized role and importance of the cooperating teacher in the overall training of future teachers is consistently attested to by student teachers and professional educators. The United States Office of Education, Bureau of Education for the Handicapped, and Council for Exceptional Children are among various agencies that emphasize the need for extensive practice experiences and the importance of supervision. As the competency education movement continues to gather momentum, and a greater emphasis is placed upon having student teachers achieve particular teaching skills while in school settings, the role and functions of the cooperating schools and teachers become all the more prominent. . . .

First and foremost, this is a question of educational ends. One is attempting to answer such questions as: What must a person be or what must a person demonstrate in order to be an effective cooperating teacher? Aside from being a "good" instructor, what skills or competencies should this person have in working with a student teacher? One of the less discussed residuals of the competency education movement is the possibility that educators and the public will finally know what teachers do by noting some public trademarks of the profession—competencies. . . .

The Cooperating Teacher Program had as its target population the training of cooperating teachers. Changes in the performance of these

teachers was of primary concern. Of secondary concern was the performance of student teachers, and lastly the achievements of pupils. The project focused upon Turner's (1972) levels three, four, and five—using teaching performance as a measure of project effectiveness. While the ultimate concern is with pupil achievement (as a function of teacher behavior), most competency education programs are nowhere near the point of demonstrating this kind of relationship, let alone making a cause and effect determination. Assuming that the competencies have some level of credibility, there is still the concommitant task of determining which of our particuar program training procedures, modular and other, are most effective. This calls for both formative and summative evaluation procedures....

Illich (1972) in *Deschooling Society* describes "skill instruction" and the accomplishments of "skill teachers." He notes, as have others, that persons can teach a particular skill without the benefit of teacher training. In fact, aspects of mathematics and foreign languages, which have a skill base, have also be taught by relatively untrained personnel. The terminal behaviors of pupils taught how to repair an engine, or how to swim, or how to sum a column of integers, are identifiable and measurable. Indeed persons without training can teach skills. But teaching and education have always encompassed more than the dispensing and accumulation of skills. The mandate handed down to public education and teachers is not very precise. Implicit in its expectations, however, is that teachers will teach *all* children whatever they need to know. This broad expectation will continue to exceed the profession's grasp, and in this respect we cannot succeed. But it should be possible for the profession to declare what it can deliver, and to note that teaching includes measurable behaviors. The teaching act does include identifiable skills. Yet in our zeal to adopt PBTE, we should also emphasize that teaching includes many human behaviors that at this point are not easily measured. These, too, are trademarks of the profession which need careful articulation.

EDWARD W. SCHULTZ, Department of Special Education, University of Maine:

Some of the most pressing problems or issues to be dealt with by special educators at present include: 1) focus of efforts; 2) quality versus quantity regarding the training of professionals; 3) clarification of professional and service roles; 4) system analysis versus focusing exclusively on children as the locus of problematic behavior; 5) investigation of alternative models to not only training personnel, but to servicing the needs of children and others within the system; and, 6) responding logistically to a receding economy that threatens many of the gains made by special education in the 1960s. At the core of these issues is the emergent role of special education as a mental health advocate within general education. For some time, special education has, in part, assumed the role of "buffer" between the mainstream of education and little or no schooling opportunities for many children. This no longer being an acceptable role, to the extent that

it was, will special education pursue a more aggressive, initiating mental health role in education? The response to this question would seem to be in the affirmative. However, some critics would contend that this would be an arrogant role for special education to pursue; that general education can handle its own need for development in this area.

There are others, though, who would welcome the blending of general and special education. The purposes of such a merger would be twofold: 1) movement toward the unified prevention of mental health problems; and, 2) the maintenance of children within the mainstream of education to the fullest extent possible. And although there will always be a need for special services for severely handicapped children, the bulk of the children serviced by special educators are only mildly to moderately handicapped and thus would profit from this latter alternative, the most plausible given the needs of society's children.

PATRICIA M. KAY, Baruch College, City University of New York:

What is a Module?

A module is basically a small instructional package or unit that is complete unto itself. It typically contains each of the five following elements: overview, objectives, pre-assessment, enabling activities and post-assessment. The overview is a prospectus or introduction that presents the rationale behind the module, its major assumptions and where it fits into the overall scheme of becoming a teacher. Module objectives specify the knowledge, skills and/or attitude that the learner is expected to demonstrate upon successful completion of the module. The pre-assessments measure either the learners' prerequisite abilities and skills and/or the learners' previously acquired competency in the objectives of the module. Enabling or instructional activities present routes (usually alternate) by which the learner can accomplish the objectives, and a post-assessment permits the learner to demonstrate that he has accomplished the objectives and is ready for further instruction.

Generally, there are or should be sufficient directions to allow students to proceed through the materials at their own rate of speed and with little outside interference. Most modules could, however, be easily adapted for large or small group instruction, and many contain both individual and group instructional activities. The emphasis throughout is on providing well designed instruction which is calculated to bring about specified outcomes in terms of explicit knowledges, skills, and attitudes. . . .

In the 1972-73 academic year under the auspices of CBTEP a number of modules were designed by faculty who had been involved in the various CBTEP university-wide committees. Through a carefully designed module development process, there was a deliberate attempt to produce materials of the highest possible quality. There was *no* attempt to produce a set of modules which might as a whole define a modularized program. Each module that was developed was intended to stand by itself although there were several that were designed to be one of a coordinated cluster of modules. . . .

We have attempted to design . . . a field-test design prototype which can serve as a model for the initial implementation of modules. The field-test prototype is intended to provide a basic framework for evaluating the appropriateness of each module over variations in time, setting and use, and, possibly, people.

Some of the questions to be answered by this first-round field-test include the following:

—Does the module communicate to the students in a clear and proper way?
—Does the module provide enough information about its own function and its function as a part of a greater program?
—Are the directions to instructors and students sufficiently clear and explicit enough to allow implementation of the module without expansion?
—Do students consider the module a meaningful learning tool?
—Do faculty members consider the module a meaningful learning tool?
—Is implementation of the module efficient with respect to time, money and involvement on the part of students and faculty?
—Is the internal structure of the module appropriate for the accomplishment of the objectives?
—Are the enabling activities realistic in their request for materials?
—Does the module have significant effects on the development of the competency specified in the behavioral objectives?

In general, the object of field testing is two-fold: to evaluate what we have produced and to study ways in which modules may be used. Hopefully, what we learn about module development and use will be of value to other educators as they attempt to develop CBTE programs.

SHIRLEY COHEN, Hunter College, City University of New York:

Developing Modules

How does one go about learning to write modules? City University faculty members who had volunteered to produce modules attended a two-and-a-half day module development workshop using a programmed guide. We learned what a module is, what parts it consists of, how it can be used. We came to the workshop prepared with areas and competencies on which we would focus, and we began to write terminal objectives, rationales, enabling objectives, etc.

I had a hard time at this workshop, as did many of the other participants, because each time I thought I had a grasp of these ideas and their development, I was told by the workshop leaders that the concept being developed was too big, that I had to break it down to make it more manageable. with a limited number of behavioral objectives. I felt somewhat like I did about my Ph.D. thesis—by the time I got it down to a narrow enough focus, one which could be pre-tested, post-tested and taught in one module, I was no longer interested in doing it. The objectives were so

narrow that I didn't see the value anymore. For a while I was stuck. Then I discovered the module cluster. This became my answer to the dilemma.

A module cluster is a series of related modules, each building on the others. By working with this concept I couls develop manageable modules which added up to something. Once this problem was resolved, the development of my first module and the outlining of two additional modules proceeded quickly....

One of the major early criticisms leveled at modules was that they were mechanistic, unhumanistic and not appropriate for affective objectives. The Special Education Committee of City University of New York was particularly alert to this potential shortcoming. It is easier to write strictly cognitive modules which operate with a minimum of human interactions and which may result in mechanistic programs of modularized instruction. But those are not the only possible kinds of modules. Both Lilyan Ruderman and I tried to produce non-mechanistic, humanistic modules which include affective objectives.

VINCENT C. GAZZETTA, Division of Teacher Education and Certification, New York State Education Department:

First and foremost, I need to point out, as clearly as I can, that our concerns are directly related to the State Education Department's responsibility to assure the public that competent persons are staffing the public schools. This is not to say that there are not thousands of competent persons already in the schools. It is directed at the system used by New York, as well as other states, to make that determination. At the present time our system of teacher education and certification is not capable of discriminatbetween the competent teacher and those individuals who merely complete education courses.

The State's move toward a competence based system of teacher education and certification is designed to provide a means by which the State can better administer its responsibilities.

First, I would like to offer a definition of CBTE because I find that to be one significant problem. There are as many definitions of CBTE as there are persons in this room, so the outline and boundaries of this concept need to be set.

In New York State we have defined CBTE programs as those systems which through the collaborative efforts of representatives of colleges and universities, school districts, and professional staff of school districts have developed:

1. A conceptualization of the roles, responsibilities, and functions of the professional positions for which persons are being prepared.
2. The public statement of the skills, knowledge, and attitudes expected of program graduates, stated as explicitly and objectively as possible.
3. The public statement of acceptable evidence of the attainment of the expected skills, knowledge, and attitudes as well as the standards and conditions by which it was gathered.

4. An instructional program which is congruent with the expected outcomes.
5. A means by which the program is monitored, evaluated, and modified as appropriate.

From the Department's point of view, *New York's competence based system permits the widest variety of program designs that can be imagined.*

RICHARD L. TURNER, Indiana University, Bloomington:

In certification, "program approval" is one option. It is the traditional option. The chief difficulty with this option is that one cannot be certain how much skill a particular individual actually has when he or she comes out of college. Can the person perform well in an actual classroom? The trainee will not have had very much classroom experience—perhaps only eight to twelve weeks of part-time work during student teaching. We could hardly expect anyone to acquire very high levels of skills during such a short period. But with PBTE program approval, which New York State already has, programs will probably be able to increase the amount of quality control and thus speak more directly to questions of individual performance. Nonetheless, at the moment there is a poor research and development basis for such programs. People who specify that certain skills should be acquired are going beyond current knowledge since they cannot demonstrate that those skills make any difference in teaching. Initially at least, they are just hoping that they will. The development-evaluation paradigm which I mentioned earlier (see line D in the figure) will, however, permit teacher educators to test their hopes against actual evaluation data.

We should be very cautious about making promises about the delivery of even a "Program Approval" option in PBTE. It will probably take over ten years to find out whether PBTE is (or was) worth the investment. Only then will we have a chance to see a large number of trained teachers in different types of performance-based programs functioning in the field.

Individual approval is the other certification option available. A certification board would in some manner test an individual at a particular time on a performance basis and decide whether or not that person demonstrates adequate performance. It is, however, very difficult for me to imagine a testing center comprehensive enough to give a fair test to an individual performer over a short period of time. Recently, when I was in Syracuse, some people there were discussing the possibility of a teacher counseling and improvement center. Here, after different kinds of measures have been used to assess and diagnose what a teacher can do, the teacher would try to improve those skills needing attention. This approach is different from attempting to certify someone by testing them at a skill center since it diagnoses deficiencies and attempts to correct them rather than to evaluate them for purposes of certification. In all, state approval of performance-based teacher education programs is probably the least noxious option in this domain.

ASSESSMENT IN CBTE:
THE SEARCH FOR EVIDENCE

Excerpts from Conference Proceedings
October, 1974
Glenmont, New York

Published By

The University of the State of New York
The State Education Department
Division for Handicapped Children

In Cooperation With

The Competene Based Teacher Education Project
in Special Education
Center for Advanced Study in Education
The Graduate School and University Center
of the City University of New York
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JOSEPH T. GILMORE, Division for Handicapped Children, New York State Education Department:

Competence based education is meant, in its best forms, to foster self-development, self-renewal, on an individual and program level. The planners hoped that the Glenmont CBTE Conference might be on target with what John Gardner wrote of self-renewal:

> "But the development of one's talent
> is the only part, perhaps the easiest part,
> of self-development.
> It is a life-long process
> that brings us to the recognition
> that the ever renewing society
> will be a free society.
> It will understand that the only
> stability possible today
> is stability in motion.
> It will foster a climate
> in which the seedlings of new ideas
> can survive and the deadwood
> of obsolete ideas can be hacked out.
> Above all it will recognize
> that its capacity for renewal
> depends on the individual
> who make it up.
> It will foster innovative, versatile,
> and self-renewing men and women
> and give them room to breathe."

This document recounting some of the proceedings at Glenmont II is offered in the hope that, like the conference, it may contribute toward the self-development and self-renewal which should be hallmarks of any competence based education program conceived and nurtured by purposeful people who allow themselves the time and room to breathe.

PATRICIA M. KAY, Baruch College, City University of New York:

Although teacher educators across the country are currently struggling with the vast array of complexities inherent in competence based teacher education, it is likely that nowhere are those issues receiving more attention than in New York State, particularly at those institutions providing professional preparation for teachers of handicapped children. Without doubt, the most difficult of the complex CBTE issues and yet the one that is most central to CBTE is assessment. CBTE assessment is the search

for evidence that teaching candidates possess the knowledges, skills and attitudes necessary for entry into the profession. That statement appears innocent enough—but has implications for initial selection of competencies, evaluation of instruction and programming, and the validation of competencies as well as for the measurement of candidates' attainment of competencies.

Assuming that there are no simple answers to questions about assessment and that solutions to the problems raised will require the attention of all members of the education community for some time to come, the purpose of the "Glenmont II" conference was to provide a context within which the special education consortia from New York State could begin to develop both long and short range plans for addressing the assessment dimensions of CBTE.

There were four kinds of activities planned for the conference that were designed to assist the thirty-one attending consortia in promulgating their own assessment plans. There were large group meetings designed primarily for input. Robert Soar, Melvyn Semmel and Frederick McDonald spoke at those sessions addressing technical issues of methodology, research models, observation techniques and results of past research which might form a base for competency identification, measurement, and further research.... Also in large session, Vincent Gazzetta spoke on "CBTE Assessment in New York State" outlining the state education department's expectations for assessment plans required in teacher education program proposals....

The second kind of large group activity at the conference is documented here as the "Contributions and Concerns" section. In these sessions, James G. Ward spoke to the potential contributions that public school teachers can make to the assessment processes as well as the concerns they share about it. Gilbert Duken and Michael Solimando addressed the potential contributions and concerns of public school administrators and teacher education students Karen Cochran, Nathan Glasper, Karen Kowalchuk, and Margaret Maxwell formed a panel to discuss the student point of view about CBTE assessment. The summaries of all the "contributions and concerns" presenters help to sort out roles and responsibilities and provide many stimulating thoughts that will, undoubtedly, become the focus of discussion in numerous consortia meetings.

The third kind of activity designed to assist consortia in the development of assessment plans was the small group meeting where members of consortia could actually sort out the issues and begin the planning processes. Facilitators were assigned to each group and a consortium worksheet was provided to be used either as a guide, a focus for discussion, or a simulation of consortial assessment plan development. The worksheet used at the conference is also included in these proceedings.

The final kind of activity that was planned into the conference was free time—actually, a kind of non-activity. During that unassigned time, participants could use the resource center that was available, talk with the facilitators and consultants informally, continue consortium meetings or simply stroll around the beautiful grounds and digest the multitude of

ideas that were presented as conference menu.

How well the conference itself fulfilled its goals is difficult to assess. The real test probably came after the participants left Glenmont and may be somewhat apparent in the assessment plans that each consortium submitted to the Division of Teacher Education and Certification in January and February, 1975. An attempt at objective conference evaluation was undertaken, however, and the results are presented here by Alice Kornblith and Cecile Segal. Their evaluation was based on conference objectives that were made public at the outset.

ROBERT S. SOAR, University of Florida:

Among the concerns that we hold for the PBTE movement are that heavy expenditures of money, time and effort may be going into teaching student teachers skills which will make no difference to the pupils they ultimately teach; that only in unusual cases, if at all, is the research being done which will test whether this is true. These concerns also stem from the fact that the research base we have for teacher education is exceedingly thin, and that we do not know the limits of its validity (i.e., for what teacher behavior, for what objective, for what group of pupils). Further, such questions are not even asked very often. . . .

Some Findings—with Implications for Program Validation

Since the terms evaluation and validation will be used in somewhat different senses here than is sometimes true, it seems useful to clarify the distinction. Evaluation, as used here, will refer to measuring the behavior of student teachers, at various points in the training program or as they teach in the field, to answer questions such as whether the graduates of this program teach differently from graduates of some other programs, or whether the specific competencies toward which a program is directed actually are realized in the teaching behavior of its graduates. Validation, on the other hand, will be used to refer to the question of whether a specific teacher behavior has the effect it is believed to have on pupils—for example, do teachers who emit greater amounts of positive affect in fact produce greater subject-matter growth in the pupils they teach; or do larger amounts of teacher-pupil interaction at the higher cognitive levels (Bloom's taxonomy) result in increased pupil ability to process information or to deal with abstractions? That is, are the beliefs we hold about the nature of effective teaching in fact true; or better, within what limits are they true? The primary focus here will be on validation of teacher behaviors, but since teacher behaviors are the outcome measures for program evaluation, some of the findings may also have relevance for that problem. The major emphasis will be on findings which have appeared in two or more studies.

The Inverted "U"

One of the major ways in which classrooms differ from each other is in the extent to which the activities in the classroom emanate from the teacher rather than the pupils. At one extreme the teacher sets the problem, directs the activities in which pupils are engaged, monitors and reinforces the work of pupils, and evaluates the results of their efforts. Pupils have little choice about what they do, how they do it, or the basis on which they will be evaluated. They have little or no "wiggle room." At the other end of the scale, pupils have a high degree of freedom to choose the activity on which they will work, with whom, how long, and the decision as to whether it was useful may be theirs, if the question occurs at all. The teacher is available as a resource, may set outer limits to the behaviors which are permitted, but even these are likely to be broad. Of course, these are extremes of a dimension along which classrooms scale, with most classrooms somewhere in between.

In four sets of data the findings have emerged that when classrooms were rank ordered from those in which pupils have least freedom to those in which pupils have most freedom, pupil subject-matter gain was lower in classes where pupils had little freedom and increased as the amount of pupil freedom increased. But this was true only up to a point, and beyond that point as pupil freedom increased, gain no longer increased but began to decrease. This is, there was an optimum point, a balance between teacher control and pupil freedom at which greatest pupil subject-matter growth occurred. (Soar, 1966 & 1968; Soar and Soar, 1972; Soar and Soar, 1973). Similar results have been found by others (Solomon, Bezdek, and Rosenberg, 1963; Coats, 1966; Brophy & Evertson, 1974). The same relationship has been found for pupil growth in self-concept in two data sets (Soar & Soar, 1973).

Although this seems such an obvious finding as hardly to warrant comment, and although it seems clear that good teachers have understood this for years, researchers have only examined this possibility recently. And it appears to have further implications. Probably the two classroom innovations which are currently being espoused with most vigor are contingency management teaching (or precision teaching, behavior analysis, or other terms) on the one hand, and open classrooms on the other. It seems clear that these two styles of classroom management fall toward opposite extremes of the balance between teacher control and pupil freedom.

The Differentiated "U"

One set of data, and to differing degrees two others, suggests that the balance between teacher control and pupil freedom which is associated with greater pupil growth shifts systematically with the complexity of abstractness of the learning objective. The general principle appears to be that the more concrete the task (memorizing the multiplication table, today's list of 15 spelling words, or dates in history) the greater the degree of teacher control which is optimal; but when pupils are involved in complex problem-solving, inferring, abstracting or generalizing, greater pupil free-

dom is appropriate. (Soar, 1968; Soar & Soar, 1972; Soar & Soar, 1973.) Although this is the general principle, for greatest pupil growth there still appear to be limits to both the teacher control and the pupil freedom which are optimal....

Different Responses to the Same Classroom Experience by Pupils with Different Characteristics

Perceptive teachers have been ahead of educational researchers in the realization that different pupils respond differently to the same classroom experience, or that different kinds of experiences are needed by different pupils for them to grow. There is support for this concept in the data, although it seems clear that this is an area which needs much more exploration than it has had. (Parenthetically, this is a concept which has recently become prominent under the names "trait-treatment interaction" or "aptitude-treatment interaction.") Some examples of this from our data follow. In classrooms in which teachers were relatively indirect, as defined by the Flanders system (that is, they accept, clarify, use pupil ideas, and ask questions, rather than lecture, give directions, criticize or justify authority), low-anxious pupils gained more in creativity than high-anxious pupils did; but in classrooms which were more direct, high-anxious pupils gained more on the same measure than low-anxious pupils did. (Soar, 1968.) Apparently low-anxious pupils were better able to use freedom in thinking than were high-anxious pupils.

Another example of differential response was the finding that disadvantaged (low socio-economic status) pupils responded differently from advantaged students to the emotional climate in the classroom. They appeared to grow more in the presence of positive affect and less in the presence of negative affect, compared with advantaged pupils. Both findings were counter to our expectations, but perhaps they mean that the disadvantaged pupil is more dependent on the nature of the classroom for his educational progress than the advantaged pupil (Soar & Soar, 1973)....

The Cognitive Level of Interaction Can Be Too High.

The implication that too much of the interaction in the classroom can be at too high a cognitive level comes from three sets of data—two at the first grade, and one at the fifth. Several dimensions of classroom interaction represented the frequency with which relatively abstract interaction took place between teacher and pupils, following Bloom's Taxonomy of the Cognitive Domain, and a Deweyian approach to teaching. These measures tended to be negatively associated with gain in both pupil achievement and self-concept. In some cases, the negative relationships held for the total pupil group, but in other cases the negative relationship appeared to be true for disadvantaged pupils but not for advantaged pupils.

We suspect this may be a finding with particular implications for pupils with learning difficulties, whether the learning difficulties come from a culturally different pre-school background or for other reasons....

What particularly concerns us is that the very teachers who are more likely to move in the direction which is advocated are the teachers who

may already be giving pupils as much freedom as is functional (or more), or engaging them in as much higher level cognitive interaction as is functional for most pupils. In a sense "good" teachers are more ready to become "better" teachers, and we suspect the same thing is true about schools and school districts. The possibility seems very real that teacher preparation programs and in-service programs may expend considerable effort toward changing the behavior of some teachers in directions which may result in less pupil growth rather than more.

Some Methodological Issues in Research and Assessment in PBTE

We have commented earlier about the importance of beginning to assure ourselves that the teaching behaviors which we teach are really functional for the growth of pupils. Contradictions in the kinds of teaching which are advocated are easy to find, and the principles which we thought were effective fairly often do not stand empirical tests. While it is clear that the organization of training programs cannot wait for researchers to answer questions of this sort, it seems nonetheless critically important that training programs begin to test, in the context of the programs, the validity of the principles they teach. There is a limited amount of evidence in the research literature which can help with this process, both by providing some concepts which appear to have been replicated, and also by suggesting new concepts for investigation which might not otherwise be considered. It seems important to cycle new knowledge of teaching effects back into preparation programs for revalidation—a kind of "bootstrap" process.

Another suggestion has to do with the analysis of the data. By far the greatest number of past researches in education have been based on correlations and t-tests. It seems clear that the relationships between classroom interaction and pupil growth are too complex to be represented adequately by such simple analytic procedures. Rather, it must be possible to look at the simultaneous effect of multiple influences. It must be possible, for example, to examine several characteristics of the child as he enters the classroom, including the home and broader community, along with numbers of aspects of his classroom experience, as these affect the changes the pupil makes. It is also necessary to look at non-linear relations, since the evidence is compelling that these are common in this area of research. While these requirements are overwhelming if conceived of as cells in a multi-factor analysis of variance, recent advances in the use of multiple regression (Cohen, 1968; Kelly, Beggs and McNeil, 1969; Walberg, 1971; Kerlinger & Pedhazur, 1973) make it relatively straightforward, using programs that are available at most computing centers. If the skills and the degrees of freedom to use multivariate procedures are available, still greater increases in power and in understanding become possible. The cost of these complex analyses in terms of effort and money is minor, but the gain in knowledge is tremendous.

But the point which seems most critical is that major expenditures are being invested in program development and implementation with little or none invested in program validation. If this continues to be true, as Rosner

and Kay commented, the effort is likely to come to nothing. We will not know, finally, whether the teaching behaviors which have been taught make any difference to pupils, and consequently, we will not know whether the program effort has accomplished anything. Too many past innovations in education have fallen by the wayside with no evidence of their success or failure. We hope for better than that for the PBTE movement.

VINCENT GAZZETTA, Division of Teacher Education and Certification, New York State Education Department:

There are basically three kinds of assessment and I want to talk about them a little bit this afternoon. First, student assessment—by the way, student is our term for a person in training. A pupil, in our terminology, is a K-12 enrollee. By student assessment, I mean the assessment of the student's capabilities. Second, program assessment—which searches the question of whether the program is doing what it set out to do. The third is another kind of program assessment and relates to the State's assessment of program quality.

In looking at these three I want to use the third as the operational base. The Department's responsibility is to do all that it can to assure the public of the quality of the program....

Let me try my hand at a very rough and simple example. Use the competency—

> The student will demonstrate at least three ways of helping retarded children to learn and identify the following parts of the body: eyes, ears, nose, mouth, hands, and feet. Each means used shall also aid in developing large muscle coordination.

Now, a statement of assessment might be: The student, in a peer-teaching setting shall demonstrate attainment of the competency by using at least two of the following three means: a physically active game, rhythmic song and appropriate body movements, gross drawing skills.

In this simple skill example I've tried to be as explicit as possible and identified the conditions—in this case, the condition is the "peer-teaching session"—and the mastery level, in this case, 3 ways to include 2 out of 3 stated ways....

There are several populations that certification deals with and all of them, I think, must be included in your thinking and planning. They are:

1. The person who begins and completes an entire registered program.
2. The person who transfers into a registered program from a two-year institution or another 4-year program.
3. The person who is now a paraprofessional in the schools.
4. The person certified in one area but who wishes to gain certification in teaching the handicapped.
5. The person who is not certified, but has experience in a non-public school.

6. The person who has completed a preparatory program out-of-state or out-of-country but who is not eligible for reciprocity.
7. The person who was certified, but whose certificate has lapsed.
8. The person who has completed a set of courses at various institutions who may not quite meet current requirements or who applies after the deadline.

Up to now preparatory programs have generally dealt with persons in categories one and two and the State, on an individual basis, has dealt with the other six populations.

Our announced plan to go out of the individual evaluation business as of February 1, 1976 for elementary and special education which I believe in very strongly, throws a responsibility on those involved in preparation programs. While we have some time before the full impact hits us in this area, it is necessary for us to look at ways of providing fair and honest treatment for those populations who are not regular members of registered programs.

MELVYN I. SEMMEL, Indiana University:

The training of personnel to work with handicapped pupils in the public schools has been the target of some professional attention (Blatt, 1966; Cruickshank, 1967; Deno, 1973; Lilly, 1971; Shores, Cegelka & Nelson, 1973), but probably has not received the scrutiny warranted by the topic. Training programs in special education have most recently been influenced by the general trend toward performance-based teacher education (PBTE). The evolution of new training programs in special education is characterized by an emphasis on the specification of training objectives in behavioral terms and the establishment of criteria for the assessment of their attainment (McKenzie, Egner, Knight, Perelman, Schneider, & Garvin, 1970; Meyen & Altman, 1973; Shuster, 1973; Schwartz, 1971; Schwartz, Oseroff, Drucker & Schwartz, 1972; Shores, Cegelka & Nelson, 1973). Alternatives to traditional training procedures are taking the form of self-contained modules designed to furnish trainees with a defined set of objectives for attaining specific knowledge, attitudes and/or skills (Thiagarajan, Semmel & Semmel, 1974). While such modules appear to be particularly promising approaches to developing specific, noninteractive teaching competencies (e.g., planning for instruction, grouping, assessment of pupil ability levels, etc.), relatively few programs have developed the means for assessing and developing interactive skills in practicum environments (i.e., behavior management techniques, questioning skills, motivational techniques, etc.).

Observation instruments have shown considerable promise as basic teacher training vehicles around which a comprehensive program for the development of interactive teaching skills can be realized (Semmel & Thiagarajan, 1973). Essentially, observation systems are used to record objective information on subsequent interactions with pupils. Finally, methods of analysis frequently necessitate reduction of observation data.

Consequently, many relevant dimensions of the observed pupil-teacher interactions (e.g., sequential patterns) are obscured—frequently resulting in an oversimplified description of the behavioral interchanges between trainee and pupils. Until these limitations can be overcome in a cost-effective manner, the practical application of systematic observation methods to teacher training in special education will remain unlikely—and the development of PBTE programs with emphasis on interactive skill development in practicum settings appears more as a promise than a feasible reality in the immediate future. . . .

Much of the writer's research and development activity is being directed toward realizing a cost-effective Computer-Assisted Teacher Training System (CATTS) (Semmel, 1968; Semmel, Olson & Weiske, 1972; Semmel, 1972). CATTS is conceptualized as a closed-loop cybernetic system capable of providing continuous, instantaneous, and/or delayed feedback of relevant teacher-pupil interaction data to a trainee in the classrom in order to modify behavior through regulatory teaching moves. These moves are determined in accordance with predetermined training objectives. The system (Figure 2) is designed to produce a cost-effective means of collecting data from systematic observations and real-time analysis, storage, and feedback of information relevant to pupil-teacher interactions in special education contexts. Feedback can be provided through instantaneous visual display in the classroom or through hard-copy computer printout immediately following an observed teaching performance. The system permits teaching situations. CATTS also provides for computer managed techniques for building and adapting observation systems and an efficient means for training reliable observer-coders. The system is designed for application in both preservice and inservice teacher training contexts. It can be used within a teacher education laboratory on a college or university campus, or directly in public school classrooms in the community. Computer access is available through direct on-line interface, Touch-Tone telephone interface from remote locations, or through off line magnetic tape devices called DATAMYTES. Hence, it can readily be seen that CATTS is a promising approach to eliminating a major deterrent to the use of systematic observation procedures in special education teacher preparation programs.

A Preservice Teacher Training Model

CATTS is used in conjunction with an evolving training model in which teacher education is conceptualized as a problem in adult learning. The learner is required to generate teaching behaviors appropriate to the educational context in which he practices. Teaching is viewed as a performance skill which is best learned by practice in training settings, with accurate and rapid feedback of performance being essential to efficient acquisition of goal behaviors. Efficient acquisition of teaching skills is dependent upon (a) the specification of target behaviors, (b) reliable and valid feedback of performance information during or immediately following acquisition trials, and (c) access to data from previous training trials.

The model currently guiding our training research efforts focuses on the

trainees' acquisition of "appropriate" interactive skills through a process of *discriminating, generating,* and *evaluating* interactive *behaviors, patterns,* and *environments.* They progress from *simulated* conditions, to practice in a controlled classroom laboratory, to the *naturalistic* context of community schools. The discrimination process is defined by the trainees' acquisition of the ability to build, adapt, and/or adopt an observation system that operationally defines the domain(s) of interest, and by the trainees' ability to reliably apply the system in observation-coding training sessions. . . .

The training model identifies three training context in which acquisition of skills can occur: simulated, controlled (laboratory), and *in situ.* There is some evidence that training in the natural environment may be inefficient and/or unfeasible for particular interactive training objectives. Trainers are frequently unable to control the occurrence of events necessary for discrimination or generation skill development. Further, trainers are frequently faced with administrative and ethical issues in proposing to develop all trainee interactive skills within the context of the public school. . . .

Application of CATTS to Inservice Teacher Training

The application of CATTS to inservice training of teachers has particular promise for contributing to more effective teaching of handicapped pupils. Existing inservice training paradigms most frequently require the teacher to "come to the training." Courses are offered at local colleges and universities, or workshops are offered by visiting consultants. These usually require meeting at some central location away from the classroom and school. Inservice activities offered through school districts usually require after-school attendance by teachers who are unmotivated and exhausted after a hard day's work with pupils. More and more, we are finding the issue of inservice training requirements of school systems the subject of collective bargaining in the negotiations of teachers' contracts. It is well known that inservice training after the working day or prior to or after the school year is becoming more and more difficult and costly. Further, attempts to improve teaching skills through direct supervisory classroom visits are frequently fraught with difficulties. Supervisors rarely use systematic observation approaches, and the results fed back to teachers are often haphazard and unreliable. Supervisory feedback is often viewed by the teacher as a subjective evaluation with potentially negative consequences; this in turn may lead to increased defensive behaviors with supervisors and/or socially acceptable reactive effects to being observed.

CATTS provides a possible solution to many of the above problems since it is a system of inservice training delivered to the teacher directly in her own classroom, during the school day, as she works with her own pupils within the context of a curriculum of her choosing. The system has the capability of delivering nonevaluative, reliable feedback to the teacher about her interactions with pupils. Feedback can be provided with a minimum of delay, thus maximizing the relevance of the information to the

modification of behaviors required for reaching specified teaching objectives. . . .

The Hammond school project. One persisting problem in the training of teachers is sensitizing them to the needs of sociometric isolates in their classrooms and developing their skills in minimizing the social rejection of such children. The Hammond Project (Ballard & Semmel, in preparation) is designed to use CATTS in training teachers to be more effective in meeting the needs of isolate children in their classrooms. An observation system was constructed by modifying the Indiana Pupil Participation Schedule (Semmel & Meyers, 1973). The system focuses on pupil and teacher behaviors related to social participation of pupils in the classroom. Observers used a portable Touch-Tone (TT) telephone, which was interfaced from the classroom through direct telephone line to the computer facility at CITH (approximately 250 miles away). Observers entered eight classrooms each day, plugged the TT telephone into a common extension phone receptable installed in each of the respective classrooms, dialed in to the computer, and proceeded to code the interactive behaviors of the teacher and target child during reading and mathematics lessons. The coding signals were instantaneously received, summarized, analyzed, and printed out at the Center. Printouts were then transmitted back to the school through the use of Xerox Telecopier and telephone. Feedback was in the hands of each teacher within a ten-minute period. . . .

The BOCES, New York Project (Brown & Semmel, in preparation) was an inservice training program which assisted teams of special educators in studying the interactive processes between staff and selected problem pupils. The school program is conducted in a self-contained special education facility for retarded and emotionally disturbed children who are not otherwise served in their schools. The school is organized on an open classroom plan. Two hundred-twenty students (K-12), 42 teachers, psychologists, and social workers, and 8 administrators were involved in the project. DATAMYTES were used for the collection of observation data by the school personnel, who developed an observation system to meet their specific interests. While CITH staff assisted in the design of the observation system and training of coders, the specification of system categories and definitions and the data collection process were the responsibility of the entire school staff.

Specification of the parameters of feedback was a collective decision of the BOCES staff. Cassette tapes were forwarded to CITH for processing and summary printouts, as prescribed by the staff, then were returned to the school in New York. Feedback ranged from specific behavior rates on categories of both teacher and target pupil behaviors, to detailed information on the child's use of different instructional areas within the open classroom environment, to three-stage sequential chains of interactive behaviors with peers and teachers. Teams met periodically to study the feedback information and establish common team goals based upon the analysis of the printouts. One particularly interesting outcome of this project was the staff's consensus that the delay of feedback was prohibiting the maximum use of the information obtained. The administration has sub-

sequently applied for and received federal funds to install an immediate feedback CATTS system within their school district, using an existing computer facility. In the past, the school district's computer had been used primarily for clerical and administrative purposes.

New Directions in Teacher Education Research

Like so many groups interested in the teaching process, we have followed the primrose path of conceptualizing teaching the handicapped as the acquisition of a repertoire of relevant teacher competencies. Hence, most of our earlier efforts in teacher training using the CATTS system have involved training teachers to acquire specific teaching skills and feeding back the results of their efforts to use these behaviors with handicapped children. Such a model has led us to training procedures which were buttressed by a number of unverbalized assumptions of questionable validity. For example, teachers were typically instructed to increase their high level questioning behavior when working with the EMR child. It was reasoned that the use of binary questions leads to limited pupil verbal responses. Hence, for the EMR who tends to display restricted verbal ability, teachers have a natural proclivity to reduce cognitive demands—thus perpetuating the limited verbal and cognitive abilities of such children—and assuring a self-fulfilling prophecy. There are a number of teaching skills which we rationalized as appropriate for use with handicapped pupils. However, such skills invariably have been assessed, using increased rate or duration as a criterion of successes, and have been fostered without due concern for appropriate antecedent interactive patterns. Hence, we have too frequently told our students to get in there and increase their use of high level questions, or use more probing techniques, or use more positive reinforcement, and the like. We have behaved as though we knew what good teaching is—as though there is a repertoire of teaching skills which is universally accepted and invariably effective with handicapped pupils. It is most likely that fundamental to teaching is, as Hunt (1971) has noted, the matching of pedagogical alternatives to specific antecedent pupil behaviors—and that such matching varies from situation to situation, from child to child, and is dependent upon a complex of interacting teacher variables. Teaching is more than acquiring a repertoire of teaching techniques—it is more than the maximizing of one class to teaching behaviors and the minimizing of another with a specific class of children. Teaching is more than simply matching appropriate teaching behaviors to *immediate* pupil behavioral antecedents. The simple two-stage Markovian chain is probably a poor model when applied to the most appropriate pupil-teacher interaction (Collette & Semmel, 1971).

I do not mean to negate the importance of assisting potential teachers in acquiring a repertoire of teaching skills. This is obviously necessary—but not sufficient. Teachers must also learn to discriminate the state of a classroom or pupil at a given point in time during an educational interchange—and to select the teaching behaviors or patterns which are the most likely to be useful, given the teacher's assessment of the most probable current states of pupils or classes. This is for me the essence of teach-

ing; it has been referred to by Shavelson (1974) as the basic teaching competency—*decision-making*. I feel that the skill is analogous in its application in the classroom to the moment-by-moment induction of attributes by treatment interactions. It is somewhat akin to teacher flexibility —a factor noted by Rosenshine (1971) and others to be one of the few teacher competencies correlated with pupil academic growth.

We must develop paradigms for training teachers to flex—to become more effective in matching their techniques to the states of pupils and classrooms on a moment-by-moment basis. To my knowledge, there is currently no systematic method for training teachers in interactive decision-making skills. We are, however, encouraged by attempts to build formal models which employ Baysian constructs and heuristic strategies to conceptualize the necessary steps for teacher decision-making in interactive settings (Shavelson, 1974).

FREDERICK McDONALD, Educational Testing Service:

The minimum requirement to conduct the type of field study that we're talking about, is to have two measures of pupil performance at two points in time. Now I'm not saying anything about what the pupil measures should be, that is open, in fact the more open it is the better. We have just finished a study in California where the two criterion variables were in the two areas of reading and mathematics. So we measure reading performance in the beginning of the year and reading performance at the end of the year. . . .

You go into classrooms and you observe. And now what you do is take these observation data and try to find those factors or facets or characteristics of these teachers that distinguish them from the others. These data become a set of hypotheses about effective teaching performance. O.K. So let me recapitulate very briefly. You have started with a criterion of pupil effectiveness in general. It's a gain criterion. What students have gained the most, what groups have gained the most, and you then identify teachers where that gain is more than you would expect in the ordinary course of events. I'm not talking about absolute scores now, I'm talking about the differences from this line. I'm not talking about grade equivalents or any of that sort of thing. Having identified these teachers you then look at any information you have on those teachers that would enable you to say they do this and the others don't do that. . . .

The real criticism of most previous work on observation should be that you look only at teacher behaviors, you don't also look at student behaviors. We have a system, a behavioral recording system, in which the observer sits in the classroom and literally writes down everything that the children do and that the teacher does with respect to the students. Now if the class were large this would be almost an unmanageable task so we developed a procedure for whom to look at in the class. The beginning of the year we asked each teacher to rank order every child in the class in

terms of how they would expect the child to do in reading and in math. We also used as part of this test battery a standardized achievement test just as an anchor point because the other things that we were developing were criterion reference or domain reference tests. And somebody always wants to know how did they really do, where "really do" means what was their grade equivalent. So we gave the California achievement tests. Now we're able for every child in the class to look at his teacher's prediction of how he's going to do which is her expectations of how he or she is going to do and how in fact they were doing. And we sorted all the children in each class, went down the list in each class, and here's expectations and here's actual performance. We did it at the beginning of the year, and again at the end of the year.... We looked at the extremes and we sampled two children out of each of these cells, one boy and one girl, and the mix represented the ethnic composition of the class. Those were the targeted children that were observed.

So when the observer went into a classroom what the observer would do, he would sit down and record everything that those children were doing over the entire day, and everything the teacher did with respect to these children. So what we have is a manageable technology for observation. At the same time, we're gathering data that's interesting. Because if the teacher doesn't interact with these two kids, in this cell, it's not very likely she's going to be interacting with the four other ones that were in that cell either. That's sampling again, there's always risk in sampling but these classes are sufficiently small that a sample of eight in some cases is half the class. And it's always about a third of the class. So you're really getting a lot of information. Secondly, you're getting extensive information, that is, you get everything that is done by these eight pupils and the teacher with respect to them.

Well that's one observation system. The other observation system tracks the teacher, follows everything the teacher does and then what the child does in response to what she does. We've used two observation systems. We had about 400 days of observation. Some teachers were observed as many as eight times in a relatively short time....

Now we have an overall model of the data that we gather all the time. The critical thing in making an analysis of this kind is that you want to know the relationship between teacher performance, student behavior and ultimately student outcome. The distinction between student outcome and student behavior is a simple one. Student behavior is what you can see the child doing as part of the instructional process. Mainly that means looking at what he's doing in the classroom. In principle it could include observing him in other kinds of contexts. It just happens to be difficult to do that sometimes. But student outcome is a measure of the child's achievement of these significant goals of education in his stage in life, or the level of education he is at. Teacher performance is what the teacher does. What you're trying to do is to identify how much of a variance in student outcome can be attributed to variances in teacher performance. That's what the whole research is about....

Now, in getting back to the teacher performance we look at teachers' knowledge, e.g., we gave a decoding test to see if teachers had decoding skills in reading, and it turned out they did. We built a diagnostic test in which children read passages on a videotape, and they made errors and the teachers were supposed to identify the particular reading errors that they were making, and then say what they'd do about it. There was much more of a spread of performance on that diagnostic measure than there was on the decoding test. In order words, teachers can decode (that group of teachers) but they're not equally effective in diagnosing somebody else's errors. Which is a very useful thing to know, because it tells you where training is probably needed. The knowledge battery also included knowledge of teaching of reading methods. It include a mathematics test on the reasonable grounds that if teachers don't know elementary school mathematics they can't teach it to the children. So that was a complex of factors. . . .

I have neglected to say that most of this research is conducted with experienced teachers. That is, the people we're looking at are people teaching in real classrooms. And the logic of that is that if you can find people who are effective there it makes sense to look at them. We pick experienced teachers because they've adapted to the system in some way, that is, they can work in classes and with kids, and so on. . . .

Now all these studies are the combination of the field and experimental studies; that is, the field study keeps feeding in ideas for skills to be tested in the experiments. Experiments will probably give us ideas for other things to look at in the field. These studies are continuous over time, i.e., they all are planned to last about five years and stay with the sample of teachers during that five year period. So it has some of the advantages of a case study. You're looking at the same people year after year after year and you accumulate an enormous amount of data on those teachers. And that becomes, in effect, a case study of those teachers. The overall strategy has the advantages of a lot of field data to generate hypotheses. It has the advantages of doing experiments to test hypotheses. It is longitudinal in character, it uses live observations of people, and it has the advantage of gathering so much data on teachers in schools that in fact you can do intensive studies of individual teachers over time and you gather a lot of information about the schools themselves.

JAMES G. WARD, New York State United Teachers:

I am here this afternoon to attempt to articulate some of the concerns classroom teachers have with assessment in teacher education programs and to highlight what I feel are some contributions teachers can make to the process. I would be remiss if I did not make it very clear from the beginning of my remarks that this is a role with which I feel uncomfortable. For too long all sorts of individuals have been speaking for teachers without systematically determining the attitudes, perceptions, feelings, values,

and opinions of classroom teachers. I have no desire to add to this. What I say here will be my viewpoint, the viewpoint of an experienced classroom teacher who now works for teachers trying to help them deal with their own particular perceived educational needs and what I say will be based on both roles I have filled.

Competency based teacher education as a movement and as a reality in New York State is a phenomenon that I have always viewed with a critical eye. Teachers in general have seen fads with innovative practices come and go over the years with little impact on improving the quality of education for children. What I am really saying is that in addition to all the specific criticisms leveled at CBTE, with which we are all familiar, we teachers, for good reasons approach any new programs imposed from above without significant practitioner input with a certain amount of cynicism. To state it simply and to the point: I view assessment as the most important factor in the future success or failure of CBTE in New York State, and I also am convinced that teachers are the one group that is going to make CBTE work if it is going to be a success. To not give proper consideration to assessment and to teachers will build in automatic failure in any teacher education process or program. . . .

Three problems come to mind immediately:

1. How do you know your objectives are meaningful and valid to meet your goals? The answer is simple. You don't and probably can't in the short run. Only after years of program operation and with sophisticated evaluation devices can this question be answered with any degree of objectivity and surety. This is why major and significant teacher involvement in developing objectives is important. If you can't scientifically assess the appropriateness of your objectives, then let's at least have the people in the field, on the firing line, the people most familiar with the ultimate job to be done, set the objectives. Reality testing must suffice for the time being.

2. Secondly, developing an assessment program to measure movement toward meeting these objectives is no easy or simple task. Here I don't offer solutions, but only highlight problems and concerns. If the pre-service teacher fails to meet X number of objectives, does this indicate a deficiency on the part of the pre-service teacher or program deficiencies? How do you control for the effect of factors external to the program? Or don't you really care? If the assessment process is going to have any degree of cost effectiveness, how do you deal with the problem of fair and comprehensive assessment of a wide range of objectives? How do you build in a due process system to insure that no pre-service teacher is unfairly dealt with? This task is difficult and crucial to program success. The development of assessment systems are the proper purview of skillful competency evaluation research specialists. I might add that few of these presently exist in education, either in the field or in colleges and universities.

3. Thirdly, is the problem of people with the proper training and skills to conduct the assessments of pre-service teachers. This is going to be a time-consuming task. Without dwelling on it at any length, let me say that it also requires specialization and skills that are not now widely

found. This is too important a component to be left to amateurs. . . .

I have been discussing what teachers can do, and I should mention what I think they should not do. I feel strongly, and many teachers share my view, that cooperating teachers should not be part of any assessment or evaluation of pre-service teachers which would be of a summative nature. In order to maintain the non-threatening, professional, and helping relationship that must exist between student teacher and cooperating teacher, the sole responsibility for evaluation must remain with the college or university personnel. This is even more crucial for field experiences in programs leading to permanent certification.

Yet another concern of teachers in assessment is in the area of the use of assessment data. This information should only be used for the purpose for which the data is collected and strict confidentiality should be maintained. Release of this data to potential or current employers perverts its original purpose and will lead to rapid deterioration of any kind of cooperative relationship in the assessment process. Assessment will become a strategic game and education will suffer.

A final word. Local contracts between organized teachers and school districts are legal agreements mutually developed in a complex and highly political environment. Assessment may well bring college people into the schools—at least I hope it would. The contract must be respected in every way. Violation by ignorance is no excuse. A word to the wise should be more than sufficient on this topic.

GILBERT DUKEN, Broad Street School, Plattsburgh:

I was pleased to be asked to speak to you regarding some possible concerns that School Administrators may have regarding the many phases of the CBTE Program. It's truly a great opportunity to be able to look ahead in the endeavor to identify potential problems, for too often administrators spend more time than they care to in the process of solving problems rather than preventing them. . . .

Speaking of communications, there's a story that I'd like to share with you. I was visiting a neighboring school recently and had occasion to overhear a conversation in the Faculty Room. Someone had just said, "C-B-T-E, what is it?" Several teachers responded. For example, one teacher offered that CBTE meant Creating Bothersome Teaching Experiences. Another clearly stated that CBTE really stood for Correcting Backward Techniques of Education. Another added that the letters were for Curse Brought to Education. Previous to this analysis of initials I had been sure I knew that CBTE meant Competency Based Teacher Education, but suddenly I left that faculty room wondering just what did it mean to me, and what does it mean to my faculty. . . .

How can we present this program so that we eventually achieve enthusiastic and spirited team support? This will probably be the most difficult task we have, for apathy and lack of commitment of people to work together continues to be the eternal plague of group effort and achievement.

Nevertheless, the CBTE program should have a head start toward achieving extensive commitment by the very fact that the competencies have been conceived, written, and in essence accepted for initial operation from all the areas of concern via the consortium approach. A warning however, if you have not begun this way then already you have a significant handicap and have overlooked a wealth of contribution necessary for a balance of opinions which will surely be encountered throughout the CBTE program. A narrow approach now may very well develop into slim participation later and result in opposition which may generate problems that might have been avoided....

Although we are all privileged, and pleased to be a part of the CBTE team, we must be sure we know who our leader is. Let us not make the mistake of telling the Institutions of Teacher Education how to run their business, and let's hope they will not make the mistake of not seeking our valued advice and assistance.

However, knowing who the leader is, is not enough! The leader must know who he/she is, and meet the responsibilities of this role. The failure to do this will ultimately result in program deterioration. As an administrator, I worry about inadequate leadership, for I want all my programs and my teachers to meet with maximum success. Avoiding problems is much more pleasant all the way around, and therefore, I'd like to suggest three considerations of leadership which I'm sure are obvious to us all but which unfortunately continue to be the agents of failure. They are:

1. Communication must be established which is continual and convenient.
2. The management model and the program goals must be clearly understood and organized, yet flexible enough to meet individual needs and problems.
3. The leadership must provide appropriate and consistent evaluation activities that concern all areas of the CBTE program and provice avenues for on-going channels of improvement....

Earlier I indicated the need for our program leaders to have management models and evaluation techniques which were organized, understandable, and appropriate. Again I mention this, primarily because I see the cooperating teacher as a central figure in the evaluation process of the student teacher. My fourth concern then is that this process is reasonable and practical to accomplish. I am fearful that the evaluation and management processes can become confusing and/or troublesome. Should this occur, it will either severely detract from the teacher's class and planning time, or he/she will become discouraged and not be willing to act in the capacity of cooperating teacher. Either way we have a problem. Therefore, I hope all efforts will be employed to conceive an appropriate process and select effective and efficient tools to implement this process.

Equally important is how this evaluation affects the student teacher. We want to be sure we "turn them on," not "off." As Norman Vincent Peale said, "Most of us would rather be ruined by praise than saved by criticism." This must be considered in our methods of reporting and record keeping. No student teacher should be abused by our program. fairness

must be an essential ingredient. There's a story of an alleged injustice in evaluation which amuses me. Instead of recording something on a critical analysis sheet, in this story it was a ship's log. On that day, the captain entered this brief account: "Mate was drunk today." When the mate became normal, he was terriby chagrined and angry; he pleaded with the captain to strike out the record; he declared that he had never been drunk before, and promised he would never drink again. But the captain said, "In this log we always write the exact truth." The next week the mate kept the log, and in it he wrote, "Captain was sober today."

MICHAEL SOLIMANDO, James E. Allen Learning Center:

Much has been said and written about the status of teaching as a profession. We in education are compared to other professions and fields of service with the conclusion very frequently emphasizing those areas in which we fall short of the full status of a profession. Literature prepared in support of CBTE cites the development of competencies that will provide the adequate and systematic knowledge base which our "profession" so desperately needs. School administrators should welcome, encourage and help any efforts which will provide the service of teaching with the full status of a profession. . . .

In coming to a conclusion about the school administrator's involvement with Competency Based Teacher Education and Certification, I would like to cite some of the positive "spin-offs" which this movement has had and will continue to have for Special Education:

a) Movement to Criterion-Referenced Assessment;
b) Education courses and the fact that there is no longer a prescribed set of courses;
c) Evaluation in terms of student progress, with the understanding that the teacher and/or the school do not hold all of the influencing factors;
d) Emphasis on the end product, the measureable, the obvious and the concrete;
e) Affective education and the fact that education of the affective domain can and should be included in Competency Based Teacher Education.

Lastly, I would like to comment about one aspect of CBTE which has been mentioned at this conference as well as at other forums and in the literature. These concluding remarks relate to my earlier comments about the status of teaching as a profession. This movement may very well find itself more and more in the realm of a labor issue which could result in additional problems and differences among staff members in any particular school or locale. Should such a development occur, one would hope that the issue would not be over the trivial or mechanical aspects of CBTE but, rather would be whether or not this movement will provide the adequate, validated knowledge base for the teaching service to attain the full status of a profession.

NATHAN GLASPER, State University of New York at Albany:

For more than three years I have been involved in some form of CBTE. Some of my experiences have been rewarding and some have not. My major concern, or fear, with the planned implementation of certification by the CBTE method, is that because of the unwillingness and lack of cooperation from those teachers who could benefit most by this type of training or re-training, the new system may be led and participated in by many of the very capable teachers who would be effective and efficient in whatever manner they taught their classes. In the meantime, the teachers who are debilitating the goals of education are permitted to continue the same practices.

What is to be done with teachers who feel they are doing an adequate job of educating the young, yet who are not even scraping the surface of their minds? If you attempt to force the system on them, many will rebel and fight, throwing those wishing to try it into an even more complex state of doubt. . . .

Upper level students who are aware of the philosophy of CBTE are shaking their heads and wondering why they should work twice as hard to achieve an "A" when they could very well take it easy and receive a "P." Some of our better students need to feel that the system is not changing to make life at school easier for teachers but to make learning an enjoyable experience for all students. I embrace some of the concepts of CBTE, but I will have to withhold my final judgment until I can be shown it is a trend in the right direction.

KAREN KOWALCHUK, State University College at Plattsburgh:

What makes competency based teacher education even more frightening is the evaluation process. It will be the most crucial test of competencies. Since it is the most crucial test, it raises several other questions. How will the evaluation information be used? When will the evaluation take place? Upon what will the evaluation be based? By whom will the evaluation be done? Will there be specific periods in the program where the students will know that they do or do not or may or may not be competent in the necessary areas?

MARGARET MAXWELL, State University of New York at Albany:

Let me begin by asking "Does Competency Based Teacher Education define the skills needed by a competent teacher?" By this I mean those skills which are trade-defined such as the carpenter's skill in woodshaving, the surgeon's skill in operating, and the writer's skill in choosing the appropriate grammar. Does CBTE present to its students those skills necessary to function in a classroom setting? To this, I must admit yes.

After 16 months, most Teacher Corps interns in the Schenectady School system can use a film projector. We can also use the techniques of set, closure, redirecting questions, and brainstorming. We have, therefore, acquired the skills that define our trade. But what about a second and far more important definition of our teaching profession—what about the characteristics of a competent teacher? Characteristics differ from skills in that they don't necessarily manifest themselves in physical actions as skills do. Characteristics stem from feelings—impressions one gives to another; subtle inferences that can mean so much between a student and teacher and can mean the success of a child's learning. Does CBTE define these characteristics? In my opinion, it does attempt although not as successfully as it does in the skill area. The Teacher Corps-SUNYA 8th cycle proposal states the following as a chief characteristic of a teacher education program: "A System of Self-Analysis and Talk Interpretation must be included in Teacher Education." (p. 52) I quote: "A combination of the professional sensitivity and the human relations components will permit development of an appropriate style of humanistic teacher education." Just what does this mean to a student-teacher? What is self-analysis? How is it performed? To what end should I be analyzing myself—to be a better teacher, social worker, lawyer, or person? And just what is humanistic education? Is it a combination of Gestalt and Skinnerian philosophies to create Maslow's "Psychology of Being"? Studying such philosophies does not define the characteristics of a competent teacher, and here, CBTE falters. One can easily define a poet's skill in using rhythm, but what about his characteristic of sensitivity or perceptiveness? The surgeon's skill in removing a cancerous breast may be defined, but what about his ability to inform a parent of a child's death? Just how does one define a competent teacher's characteristics?

This leads me to the second area of questioning CBTE: measurement and evaluation procedures. How easy it is to give each student a cognitive test on the knowledge level regarding the year Columbus crossed the Atlantic. The answer has been known over years and years of history books. Certainly, then, the measuring of a student teacher's knowledge of specific skills is also easily accomplished. Performance evaluations in the psychomotor domain are also easily done. The film projector either works or not, indicating whether or not the student knows how to operate it. Problems arise, however, in the affective domain which parallel the same problem CBTE has in defining the characteristics of a competent teacher. Take for example the behavioral objective in the affective domain that follows: the teacher shall motivate her students to attend a human relations workshop. An evaluator is attending this teacher's class to measure the objective. The students won't go. The teacher is judged incompetent in that characteristic. Hopefully, this is a hypothetical situation but for discussions sake, I am criticizing the inability of this evaluator to pre-assess 1) the type of atmosphere in which the objective is being met. For example, there might have been a fight previous to this class meeting which has caused the students to "turn off." Would an evaluator know this? Should he consider this in his evaluation? 2) Have the teacher and evaluator ade-

quately prepared for such an evaluation? Does each know what the other is trying to accomplish? Oftentimes, while skills may be easily defined and measured, characteristics are impossible to measure without considering every idiosyncracy in an educational setting: the students, the teacher, the weather outside, the principal's speech over the intercom. Can this type of consideration be made in CBTE? Is there any valid measurement in the affective domain?

CBTE IN SPECIAL EDUCATION:
COMPETENCY ASSESSMENT

Excerpts from Conference Proceedings
August, 1976
State University College of New York at Plattsburgh

Publication
of
Conference Proceedings in Preparation

GILBERT F. SHEARRON, College of Education, University of Georgia:

1. At what level of specificity are the competencies that are to be measured stated? A major problem in measuring competence is the lack of operational definitions for the competencies to be measured. Instruments designed to measure competence should relate directly to the statements of competence. The more specific the competency statements, the easier the task of measurement. Failure to operationally define competencies leaves us with highly subjective measures that are no better than what has traditionally been used. Consider the following competency statement found on many lists of competencies. The teacher gives clear directions to pupils. What does this mean in terms of measurement? The situations in which this competency might be measured could differ significantly. For example, the preservice teacher could be giving directions for behavior in the classroom or the directions could be the assignment of a lesson in mathematics. An operational definition is needed that defines specifically what kind and type directions are to be measured. . . .

There are currently hundreds of instruments available to measure teacher behavior. Kay (1974) reports that these instruments fall roughly into two types, neither of which is wholly appropriate for measuring the performance of preservice teachers. The first type contains instruments used by school systems to rate personnel and instruments developed by colleges and universities to measure performance in student teaching. These instruments are very subjective because of the lack of operational definitions for the categories being measured by the instruments. The second type of available instruments contains those that have been constructed primarily for use in research. These instruments usually focus on some highly defined and very specific teacher behavior. These instruments can provide evidence that preservice teachers possess specified skills in isolation, but they do not measure the complexities of classroom situations.

WILLIAM J. TIKUNOFF and BEATRICE A. WARD, Far West Laboratory for Educational Research and Development:

As can be perceived from the title of this section, we will argue that to date any attempt to assess a teacher competency has been a single variable procedure, and that what is needed instead is a multivariate approach. This is to say that the CBTE movement has tended to treat teacher competencies in a generic fashion, assuming that such competencies can be applied across all teaching situations and fit comfortably into each. Thus, when assessing such competencies, the tendency has been to look at the performance of the teacher as the most important, single evidence of attainment of competency. Further, if generalizability of competencies has been attended to at all, it has been assumed that once one had accomplished

attainment of a competency, one easily could perform in a similar fashion whatever the setting.

It is precisely this stance which we feel is unrealistic and with which we take issue here. The act of teaching cannot be investigated successfully unless one takes into account *the context in which it occurs.* By this we mean that a single teaching competency cannot be considered in a vacuum. We must also take into consideration the total context of the teaching/learning event in which the teaching competency occurs. . . .

The paradigm for assessing teaching competency within Context-Based Teacher Education which we are proposing here has its origin in a metaphor proposed by Lou Smith.* He was reminded while watching springboard and platform diving competition that both the degree of difficulty and the level of performance were considered in judging individual dives. In competition, the degree of difficulty of a dive is set and agreed upon prior to the performance of a single diver. This preactive judgement no doubt is the result of much negotiation among coaches, judges, divers, and the governing boards of the various athletic organizations which sponsor such competition. The judges then witness the dive as performed by an individual diver and assign a number score of from 0-10. This level of performance score is derived by rating the performance of the diver along aesthetic principles such as angle of the body upon entering the water, "perpendicularness" to the water at crucial junctures of the dive, whether the diver "goes over" when (s)he enters the water, how much splash (s)he effects upon entering the water, etc. Also, the performance always is subject to influences of personal aesthetics, such as whether or not a judge liked the dive as a total effort. In order to ascertain a total score for an individual dive, several judges judge the level of performance and this is multiplied by the degree of difficulty of the dive, with the highest and the lowest scores thrown out and the rest added up.

It is such a process that we propose for assessing a given teaching competency. By attending both to the degree of difficulty within the context of the total instructional ecology as well as to the level of performance, we believe that the act of assessing competency is placed in a better juxtaposition to the reality of the classroom. . . .

Research on teaching has just recently begun to stress the combination of quantitative and qualitative methodologies in holistic analyses. Building from our own work, we find that within such a data collection/analysis/interpretation framework, reliability and validity assume a different meaning. That aspect of teaching which can be judged to be *reliable* and *valid* is the *appropriateness of the teaching act given the context in which it occurred.* By appropriate teaching, we mean teaching that:

—takes into account the multimethod, multisituation, multiperson, multivariable possibilities that exist in a given teaching/learning context,

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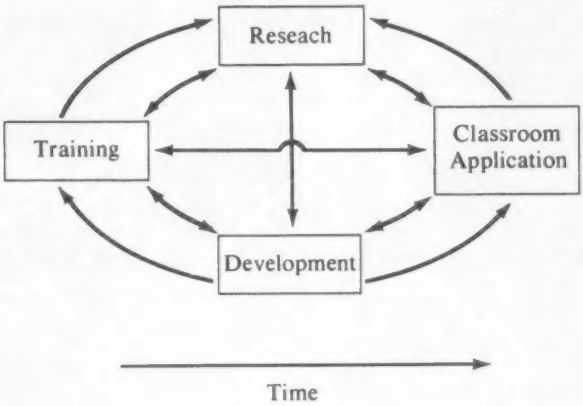
*Louis M. Smith, "Effective Teaching: A Qualitative Inquiry in Aesthetic Education," a paper presented at the *Workshop Exploring Qualitative/Quantitative Research Methodologies in Education,* San Francisco: Far West Laboratory for Educational Research and Development, 1976.

—is responsive to these multiple factors, and
—establishes, as a result, a set of conditions that maximize the potential for the teaching/learning event(s) to be successful, e.g., achieves the desired goals for the teacher and the students. . . .

Basically, the model we are advocating consists of a team composed of teachers, researchers, and trainers. It is interactive in that all three constituencies participate equally in deciding what about teaching should be studied and how it should be studied (see Figure 1). Having reached this decision, each member of the team undertakes taks reflective of his/her own expertise and interests in order to answer the research question. Thus, teachers would inquire into their own teaching to determine the extent to which they and others already may be using those aspects of teaching on which the research is focused. Consequently, researchers would proceed to conduct the study, and trainers would monitor the data collection procedures used by teachers and researchers in order to establish ways of applying these same procedures in training. They can conduct small-scale pilot tests of some of these applications, and interaction with others on the team will enable them better to hypothesize possible outcomes of the research and their application to training.

FIGURE 1

Interactive Model of Research,
Development, and Training in Teaching



From Ward and Tikunoff, *An Interactive Model of Research and Development in Teaching*, San Francisco: Far West Laboratory for Educational Research and Development, 1976.

PAUL POTTINGER and GEORGE KLEMP, Institute of Competence Assessment, Division of McBee and Company, Boston, Massachusetts:

A. "New" competencies must be identified and operationally defined.

There are many outcomes of the learning experience that have greater validity than grades in school as a basis for awarding credentials. Those that have been identified have been accepted as being important and meaningful in establishing a person's competence, yet many academicians have not sought to operationalize, measure, and award credit for many of these learning outcomes. There are many criteria other than traditionally-rewarded scholastic achievement that are important as competencies in the practical world, and most of them are as yet unidentified. . . .

F. Standards of performance for awarding credentials should acknowledge levels of performance required for entry into roles outside of academic settings.

The establishment of criteria or standards of competence is one of the most difficult problems to be addressed. In every case, where standards of competence are determined for new or for more traditional outcomes, appropriate *levels* should be established by sufficient empirical evidence to ensure that they will not be viewed as arbitrary. Many educators are satisfied with *a priori* judgments of what skills and levels of performance are adequate. It is startling to realize how much we accept the face validity of credentials and how little we really know about (1) the correspondence between the abilities and levels of performance that these credentials represent, and (2) what is needed for adequate performance in life's tasks. We need to develop better benchmarks for evaluating the standards and the offerings of postsecondary institutions. . . .

The theoretical distinction between general education and competency-based education is that the latter requires an empirical and causal link between measurement responses and their meaning, as related to real-world life outcomes. Most competency-based programs, however, merely correlate test responses with specific criterion-referenced outcomes (and many do not even do this) without discovering the underlying causes of these responses. Many educators make the mistake of thinking that if a test correlates with a behavioral criterion variable in the world of work or elsewhere outside of the academic world, one can develop competence by "teaching to the test." But this notion confuses correlation with causation, i.e., the fact that tests correlate with observable criteria may only indicate the existence of a causal intervening variable which is really responsible for behavior and which has not been measured.* . . .

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*For example, vocabulary is correlated with college grades. However, one would not go about improving college grades merely by increasing vocabulary. Doing well in school requires abilities for problem solving, utilizing new information, and other skills not measured by vocabulary tests. Vocabulary is merely a tool, and how it is used depends upon other abilities and characteristics of the individual. One cannot do well in school without a reasonably adequate vocabulary, but having a strong vocabulary will not guarantee success in school without its effective use.

Many people who support the competency-based education and assessment movement do so because it symbolizes a set of values. These values of accountability, relevance, equity, and meritocracy, are the ideological essence of competency-based education. To the extent that people share these values, what is known as the "competency-based" approach to education becomes powerful politically as well as ideologically. There is great danger in this power, and these dangers have already become greatly magnified by those who pay lip service to the new values and ideology, but fail to change their behavior in any significant way from the traditional academic position.

Many educators, who are innovators in educational delivery systems and focus on non-traditional learning outcomes, are ironically hastening the *coup de grace* of competency-based education more than their "traditional" colleagues. This is because they fail to understand the qualitative differences between assessment procedures or measures that are truly rigorous, reliable, valid, and *meaningful*—i.e., construct validated and empirically related to real-world outcome—and subjective assessment that is "new" but no more meaningful than traditional techniques. While many educators develop programs under the titles of contract learning, goal-oriented, performance-based learning, programmed learning, experiential learning, and numerous other innovations which espouse the ideology of competency-based education, most of them fail to capture or even recognize the essence of competency-based assessment procedures as *construct-validated and criterion referenced.*

J. HUGH BAIRD, Brigham Young University:

A story is often told of the airplane pilot who interrupted his passengers to announce that he had good news and bad. The good news was that they were in a jet stream and were making excellent time, the bad news—that they were lost. Today, many teacher education programs are lost—they are not moving their students toward an identified goal. Competency-based teacher education is an attempt to prepare prospective teachers in terms of specified observable goals. . . .

The following eight questions need to be answered specifically and in some detail, as an assessment management system is planned. Ideally decisions regarding these questions will be made by those persons to be affected by the decisions. Your time today should be spent in thinking about the questions and writing tentative recommendations of answers which will result in the best assessment system for your program.

1. What information (data) is to be used in making decisions about trainee and/or program
2. Who uses these data-for what purpose
3. Who is to collect the data
4. How often are data to be collected

5. What instruments and procedures are to be used in collecting data
6. When are data needed (how often)
7. In what form are data to be kept and/or displayed for those who use it
8. How are decisions and judgements communicated to those persons who need to know . . .

As you struggle with questions regarding assessment there are two principles which I value, and which you may choose to use as guides.

Principle 1: Parsimony—In making a decision, don't collect any more data, nor involve any more persons than are absolutely necessary.

Principle 2: Involvement—Those affected by a decision should be involved in making it.

SECTION IV

MODULES

MODULES

For the training of teachers of the handicapped, the project has developed, field tested and evaluated five instructional modules. They are as follows:

Family Reactions to the Handicapped Child: Shirley Cohen, Hunter College. Module I in the cluster *Parent Involvement in the Education of Young Handicapped Children.* Pre-service and in-service training in awareness of the impact of a handicapped child on the life of a family.

How Parents Can Help: Shirley Cohen, Hunter College. Module II in the cluster *Parent Involvement in the Education of Young Handicapped Children.* In-service training in awareness in the ways in which parents can be usefully and effectively involved in the education process.

Parents As Partners: Home-School Plans: Shirley Cohen, Hunter College. Module III in the cluster *Parent Involvement in the Education of Young Handicapped Children.* In-service training to expand the teacher's skill in working with parents to foster children's learning.

Interpersonal Perception: Lilyan Ruderman, Lehman College. A pre- and in-service module in Special Education that is designed to enhance the teacher's empathic ability and to put it to positive use in the use of an academic task.

Modality Linking: Selection of Activities and Materials: Marvin Stober and Wilease Fields, Teaching Resource Center. A module designed to help the in-service teacher in Special Education learn to match materials and modalities and to devise activities to strengthen the learner's weakest modality.

DETAILED DESCRIPTION EXAMPLE OF SPECIAL EDUCATION MODULE

Summary of: **How Parents Can Help**
by Shirley Cohen

Terminal Objective:

Given a description of a group made up of five parents of young handicapped children, you will demonstrate skill in planning and carrying out a workshop on home-teaching, under simulated conditions.

Element I

Objective:

You will state: 1) different kinds of information parents and teachers need to exchange, 2) reasons why and the ways in which parents should be involved in the education process; and 3) the current attitudes of educators towards parental involvement in the education process.

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Activities:

Students answer 20 true-false questions based on five readings. Students ask four educators to fill out a questionnaire on their attitudes towards parental involvement and discuss the results.

Element II

Objectives:

You will name and describe two parent organizations and two home-based programs for young handicapped children.

You will describe the guidelines, benefits and cautions about using parents as teacher aides.

Activities:

Students read material about and by parent organizations, visit two meetings of parent organizations, and speak to parents who work as teacher aides.

Students view the film "Learning in Joy" and discuss the film considering six questions listed in the module.

Element III

Objective:

You will develop preparatory skills in communicating with parents and in planning both individual conferences and group workshops with parents.

Activities:

Students read articles related to parent-teacher conferences and using written protocols, they must: 1) label affective reactions of parents and teachers; 2) correct and supply the teacher's comments in conferences; and 3) write a script for a parent-teacher conference and role play it.

Assessment Procedures

The pre- and post-assessment are identical for this module. The assessment is a written test containing eleven questions. Performance on specific questions on the pre-assessment determines the student's entry level in the module. In the first four questions, students are asked to list various aspects of the cooperative role of parents and teachers in the education of the handicapped child. Students are asked in several of the questions to cite and discuss parent organizations and home-based or parent-intervention programs. In Question 11, students are presented with an excerpt from a parent-teacher conference and asked to respond to several questions analyzing the meeting. In the last question, students are asked to plan a workshop for five parents of handicapped children.

MODULE FIELD TEST

Four of the five* modules for the training of special education teachers that were developed for the purpose were submitted to a field testing that extended from the summer of 1974 through the fall of 1975. In most field test sites all of the content was used, but in several settings there was experimentation with parts of the module. Instructor interaction was an additional variable. Some instructors made extensive modifications or adaptations, others made moderate changes to accommodate students' needs while in a few instances instructors let the module do the whole job. On the college level modules were usually incorporated as additional or alternate assignments but in one instance the module cluster was the basis for the course. At the inservice level, "alternate" settings were explored. These included: (1) instructor input with a group of teachers within a school, (2) independent group work within a school and (3) independent study. In addition, one of the modules served as the basis for an intensive all-day workshop for the entire staff of a special education program.

The field testing and evaluation was designed to test the effectiveness of the modules as learning tools under these varying contexts and to provide data on any needed revisions prior to widespread distribution. Data sources used included the following: students, instructors, observers and work samples. Information about time requirements, manner of implementation, reactions, achievement levels and suggested revisions were collected and analyzed.

For most contexts, the field test results indicate that the modules have done an effective job in the development of the competencies specified in the objectives particularly when instructors have modified the materials to match the sophistication level of their students and added activities which provide experiences with the handicapped population of interest. In addition, at the college level the effectiveness of the modules was enhanced when the module was related to other work in the course. In inservice settings, where students already possessed minimal competence, expansion of the materials markedly increased performance levels. . . .

*No data are available on the fifth, *Parents as Partners*, as it was completed too late to be included in the field testing.